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A Tale of Two Cities

The Voluntary Health Association of India (VHAI) is a non-profit registered society formed by the federation of Voluntary Health Associations organised at the level of States and Union Territories. VHAI links over 3000 grassroots-level organisations and community health programmes spread across the country.

VHAI's primary objectives are to promote community health, social justice and human rights related to the provision and distribution of health services in India.

VHAI fulfils these objectives through campaigning, policy research, and press and parliament advocacy; through need-based training and provision of information and documentation services; and through production and distribution of innovative health education materials and packages, in the form of print and audio-visuals, for a wide spectrum of users — both urban and rural.

VHAI tries to ensure that people-oriented health policy is formulated and effectively implemented. It also endeavours to sensitise the larger public towards a scientific attitude to health, without ignoring India's natural traditions and resources.

26 75

DELHI

COMMUNITY HEALTH CELL

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Bangalore - 560 034

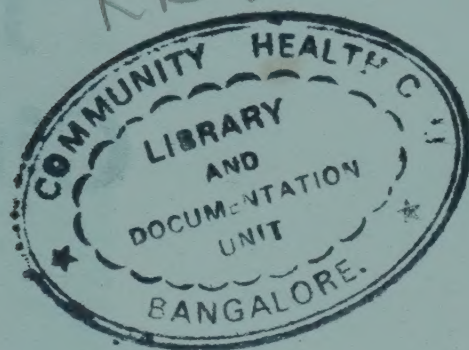
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A Tale of Two Cities

A VHAI PUBLICATION



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FOREWORD

CONTENTS

• Foreword	
• Health Status in Delhi : Context, Problems and Prospects	1
• Delhi - The Journey of a legend	11
• Profile of "Two Cities" in Delhi Demographic, Health, Education and Housing	23
• Public Utilities and Amenities	41
• Rising Criminal Behaviour	61
• Action	70
• Glossary/References	71

FOREWORD

Delhi has survived numerous invaders over the centuries. But will it survive this "siege within"? The symptoms of Delhi's problems are too pronounced to evade anybody's attention. We are one of the most polluted cities in the world. Our citizens agitate for the right to defecate in public places. People die routinely from cholera and malaria, hardly a few kilometres from the nerve centre of health care in the country. We are still to bring to justice the criminals who butchered 2000 citizens in the 1984 riots.

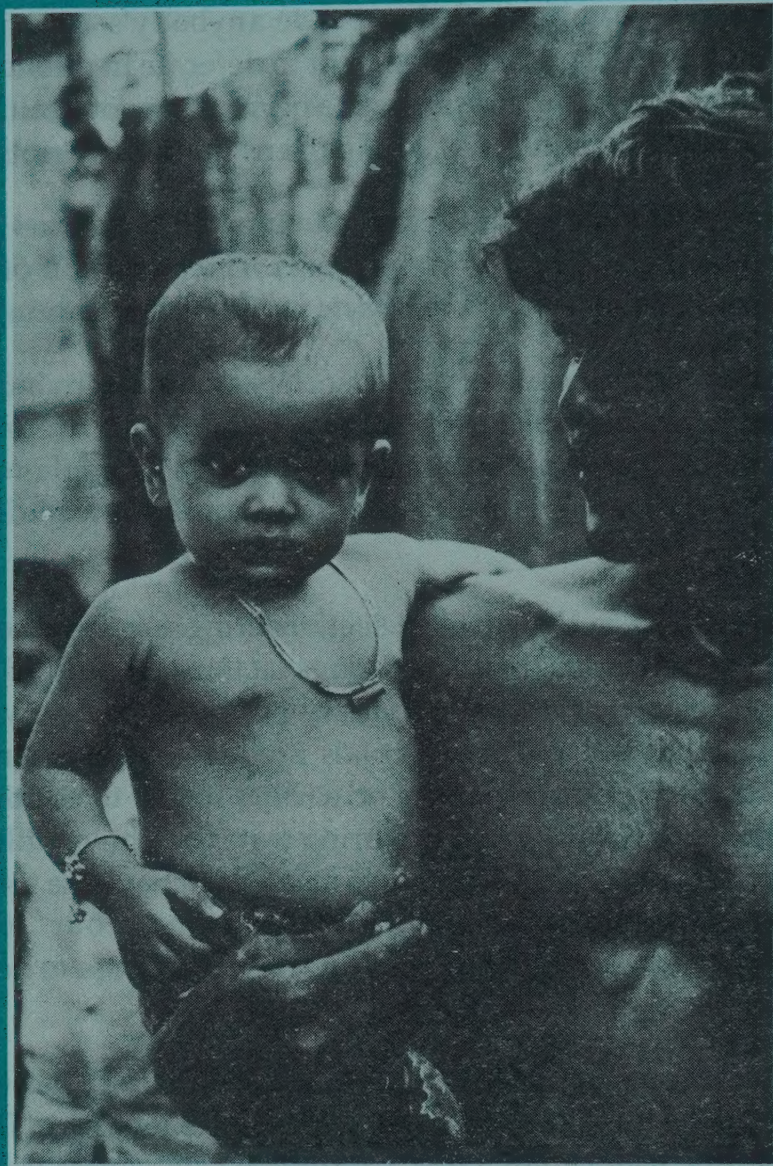
Here, the rich, the elite and the politically privileged live in a most salubrious and luxurious environment which would be the envy of elite of any country in the world. The other half of the citizens go through the routine of waking at the crack of dawn to collect their basic necessity of minimum supply of water.

This city, which prides itself as having the cream of Indian society as its citizens including intellectuals, writers, administrators, journalists, political activists etc., finds them caught up in an unbelievable state of inaction. Perhaps the powers that be ensure that these citizens never feel the struggle for existence in Delhi. Their houses are surrounded by manicured lawns and all manner of subsidised facilities. Perhaps the mosses have entered their soul.

A blatant example of this callousness is the current electioneering for the throne of Delhi. Day after day ordinary citizens are entertained with fights between various factions of political parties — not for principles or programmes but for perpetuating individual or family power or the powers of mafias and coteries. Meanwhile, concerned citizens, activists and intellectuals are almost ritualising their form of protest by walking from Constitution Club to Parliament House or writing letters to editors of newspapers. Ordinary citizens who are caught up in a stressful daily grind of storing water, fetching milk, commuting long distances to work, haunting government departments over minor issues do not have the time or energy to express their frustration and anger. Perhaps the election is the only time that we can ask our "leaders", who are going from mohalla to mohalla and house to house begging for votes, what they propose to do to ameliorate the problems of Delhi's citizens.

Keeping in mind some of these concerns, we felt it is important for us to raise these issues through this modest report. We hope the report can do its bit in turning the current electioneering in Delhi from personal feuds to pressing general problems that this historic city faces. Continued callousness exhibited towards these grave problems might lead to a situation where we should be writing Delhi's epitaph.

Alok Mukhopadhyay



HEALTH STATUS OF DELHI: CONTEXT, PROBLEMS AND PROSPECTS

Despite the literary title of this report its objective is rather modest. It is an attempt to take a snapshot of issues related with health in Delhi at the beginning of the last decade of this century. In these few pages we have summarised vast amount of technical data, research reports, journalists' accounts, impressions of several key people deeply concerned with the future of Delhi and the outcomes of lengthy discussions with the residents of the deprived and privileged areas in different parts of this grand city bequeathed to us by history. In all our investigations our primary concern was the health status of the residents of Delhi, and indeed of the city itself. We have discovered that there is a strong relationship between the health of Delhi's residents and the specific area of the city where they reside. We have highlighted these variations and drawn attention to their consequences.

Urbanisation and Modernisation

The subject has proved both vast and complex in all its dimensions. The processes leading to urbanisation on the one hand, and to modernisation, on the other get intertwined and inseparable. Quiet and elegant places like Hauz Khas village in South Delhi, gradually become alive and are no longer troublesome only to themselves. Problems keep multiplying at an alarming rate and yet Delhi continues to pretend that it has a historical role as an Imperial centre; as a place for commercial, political, cultural, educational and other activities at national and international levels; and as a magnet to the nation. The cumulative effect of these 'attractions' has resulted in an unrelenting increase in Delhi's population. The human costs of such a trend are enormous. It is abundantly clear that Delhi as a city would have a future only if the danger signals do not get ignored and resources

appropriate to the Capital's real needs are accumulated and efficiently deployed, without further loss of time.

Social Justice

Some of what is presented in this report may prove to be controversial but it may also help to stimulate response from the policy makers, professionals, scholars, voluntary and governmental agencies, providers and most importantly, the consumers of services. The emphasis in this brief report is deliberately on equity and social justice but not in any overtly ideological sense. It is not, for example, demanded that the privileges enjoyed by some must be abolished. Throughout the report, however, there is an explicit or implicit appeal that privileges must be shared and extended to the areas where decadence has become a norm. The stark contrast between the provision and utilisation of amenities; between the access to resources and opportunities; between the deprived and the favoured should not be willingly accepted.

Delhi has had its fair share of visionaries and they include from Raja Dhuloo to Vikramaditya to Ghyasuddin Tughlaq to Shahjehan to Lutyens. They and many others, worked for their respective utopias and the city does have a history of a glorious past. It is, however, the geography of Delhi that concerns this report. Substandard and badly built urban infrastructure creates a wide variety of problems for those who live there. The level of ill-health and its relation to spatial distribution of services is clearly linked. While making an appraisal of the health care delivery system, in the context of the type of neighbourhood in Delhi, we could not dismiss the overwhelming evidence of the high incidence of

disease and ill-health, of educational disadvantage and unemployment, of the growth of violence and crime. **The glaring variations between the multiplying deprived areas and the islands of glory demand immediate action.** Some of those who live in Delhi now, and their numbers are growing at an alarming pace, seem to have inherited from Delhi's founding fathers humane and aesthetic ambitions but not sufficient resources to maintain an acceptable quality of life. There are signs of confusions everywhere with regard to the patterning of services and their planning, delivery and management. Conscious purpose and informed action to tackle ever-increasing problems in a coordinated and comprehensive manner would go a long way in saving Delhi from the impending disaster.

Strategies for Housing the Urban Poor

In an age of sophisticated technology and innovative ideas it is always tempting for any city, and Delhi is no exception, to get overwhelmed by one fashion after another—for example large scale demolitions; massive resettlement of the urban poor; upgrading of the existing slums; construction of high-rise buildings; advocacy for underground transport system as well as privatisation of city surface transport; hosting of Asian Games; setting up of hospitals with latest facilities etc. The list is almost endless. A few years after their launching these projects go directionless. As a consequence of such impressive experiments Delhi is becoming identified with its countless problems. The fabric of Delhi is no longer capable to cope with the demands placed on it. Rapid increase in population; excessive density; suffocating and crippling pollution; chronic shortage of basic and essential amenities; increasing squalor of the deprived areas; inequalities in the distribution of education, health, housing and welfare services; rising crime and violence; loss of life and limbs in traffic accidents; and several other characteristics associated with urbanisation in the Third World countries put together do not seem to diminish the 'strong pull' that the Capital of India possesses. The problems keep manifesting themselves with stubbornness and reflect the complicated and bewildering interactions of prevailing values, ideologies,

lopsided patterns of resource allocation, uncoordinated and unrelated policies, their half-hearted implementation within the historical, political, social, economic and cultural context of Delhi, and indeed of India.

Delhi is Passing Away

The current trends in the distribution of facilities, resources and services are contributing to a certain collapse of the existing system. Bold solutions to known problems appear to be outside the scope and constraints of the policy makers and administrators. **Years of poverty, neglect and decay of substantial areas of the city, and of the people living there, have cursed Delhi to die a death by thousand cuts.** There is a climate of pessimism about the future of Delhi. When we try to imagine a typical resident of Delhi a picture of a desensitised, demoralised and deprived man emerges as an image. **Delhi, the artifact of civilization, is sadly passing away and the stench of social pathologies being generated is creating suffocation and disease.**

The diverse, and apparently unrelated, problems which have created the existing situation in Delhi actually relate to the whole Indian society. Those who have sifted through vast amount of data and research outcomes to compile this report share a sense of horror and disbelief in accepting the long-term consequences of present conditions. The problems have become even more grave with the passage of time and from the lengthy process of decline leading to establishing a deprivation syndrome in which people suffer an accumulation of disadvantages. The future of Delhi is already here, for the city has allowed itself to be changed at a shattering speed in too short a time without taking appropriate measures to safeguard its own survival.

Need for a Comprehensive Information System

This report is primarily concerned with the identification of factors which have an impact on the health of the residents of this city and of Delhi itself. Vast quantities of available data have been assembled, evaluated and analysed in terms of health. Owing to

time constraints we had to rely on the published data and writings which frequently do not give area-wise breakdown on specific items. Often the data were not consistently useful indicating the need for a reliable, comparable, pertinent information system or a data bank as a tool for assisting the policy makers, the administrator, the scholar, the activists and the providers and users as well as non-users of services, facilities and resources.

Area Specific Problems


However, this picture of a distorted Delhi is not entirely new for it has been emerging in fragments from various reports and writings based on formal and informal research outcomes. The recent rapid and relentless process of urbanisation has contributed to creating visible and measurable scarcity of essential resources (land, water, electricity, housing stock, health and educational facilities, employment opportunities, law and order, good quality environment, communications etc). The success in obtaining all or any of these largely depends, amongst several other factors, on political or bureaucratic power, influence, economic wealth and social prestige etc. Some people all over Delhi, and most of the people residing in the deprived areas of the city, get only a small share of these amenities because of the system of uneven distribution. A gaping gap, however, does exist between the quality of life of the citizens of Delhi living in the privileged areas and their counterparts. The contrast is often striking although some deprivations, in various degrees, can happen anywhere in the city. It can be asserted with confidence that some of the problems of Delhi are area-specific and conditions in such localities have fallen to a level which demands urgent intervention by the concerned agencies. Even if it can be argued that inequalities are inherent in the existing structure of Indian society and are, to some extent, inevitable there is still a case for more efficient and more just allocation of resources as well as for a coordinated and efficient system of delivering services. We urge that the notion of social justice should become the basis for defining problems and for guiding efforts to find their solutions.

Garden City Vs. Garbage City

The deprived areas have higher rates of health problems when compared to the privileged areas. The contributory factors of these visible variations include poor supply of health services; non-utilisation or under-utilisation of services; non-availability of sufficient numbers of qualified doctors, nurses and other health personnel; long distances and travelling time to health service locations; inability of patients to pay for treatment; substandard housing; malnutrition; poor sanitation and hygiene; ignorance and illiteracy; unemployment and low income; general lack of command over resources etc. **The deprived areas in Delhi, thus, present the rotten side of urban life and the privileged areas only the glamour.** There is manifest and ample evidence of disparities in the quality of life of the residents of these two distinctively separate types of areas in Delhi. These inequalities are the result of incoherent and haphazard policies, uneven allocation of resources, financial constraints, sharp increase in the demand for these services, inability of the services to keep pace with the changing situations, poor management and a chronic disregard for those unable to demand their share of facilities. **The deprived areas are consequently becoming breeding places for ill-health and poverty, for illiteracy and delinquency, for unemployment and substandard environment.** Major and sustained efforts should be planned and vigorously carried out by all concerned agencies and should be supported by the nearly one crore residents of Delhi to break this unacceptable cycle of deprivation.

Dynamics of Health

Health is a socio-political, socio-economic and socio-cultural issue and does not entirely depend on the technical operations of health and medical services. Delhi has proved that neither a large quantum of health services nor the acquisition of sophisticated technology in themselves guarantee better health status. There is a legitimate need to comprehensively scrutinise the objectives, scope, structures and operational functions of all activities which



affect health, directly or indirectly. If the task before all these services is to meet the total challenge posed by the health problems of the residents of Delhi then the emphasis should be shifted from the vertical provision of services offered by separate and often administratively and financially unrelated departments (such as welfare, health, housing, electricity, police, traffic, transport etc) to looking at them in horizontal terms. This entails encouraging a sense of inter-relatedness of various conditions of life and a corresponding inter-linking of attempts to resolve problems. It is the collective effort to find practical solutions to common problems that strengthens the morale of all participating agencies and individuals.

Deprivation is not an exclusively urban problem. It can occur just as easily in rural areas. **But the high density clusters of those who are profusely deprived, live in certain areas of the city.** It, therefore, seems practical to give priority to such areas so that their complex problems could be tackled through coordinated efforts and interventions by a number of agencies. Such a holistic approach, backed by adequate resources jointly set aside by the government and other funding agencies, can help to improve the selected area in response to its specific needs. Such programmes for recognisable geographical areas are basically reformist in character but the interventions should strictly be short-term in duration and pointedly aimed at combating multiple deprivation at several levels and in a coordinated way. **Compartmentalised policies and the fractured and segmented services generating from them do not remove chronic urban deprivation.** They only manage to change the dimension of one or two problems and perhaps contribute to create more problems.

Most of the evidence presented and the analysis of the data in this report have policy implications. Urban resources in Delhi would always be scarce and who gets what, when and why would be determined by political ideologies, bureaucratic will power, professionals' interest, efficiency of management techniques, fashionable programmes of the day and, to some extent, the outcry of the victims of this neglect. Piecemeal reforms cannot cope with the

ever-increasing complexity of the problems and with the speed at which they multiply.

Need for Area-based Policies and Services

The announcement of elections in Delhi on 6th November 1993 has created a feeling that the time is ripe to tackle real issues particularly those relating to the distribution of resources, access to services and the quality of life and of environment. Sufficient evidence has been presented in this report of the spatial basis of inequality in our city. **It has also been argued that so far, the response of the agencies responsible for policy making and their implementation to the growing challenges has been very weak.** We are acutely aware that the provision of services depends on a complex interplay between policy makers, professionals, providers of services, pressure groups and the consumers. We request that in the forthcoming debates on the future of Delhi adequate and pointed attention should be paid to all factors which affect the health of individuals and areas. The emphasis should be on area-based policies and their implementation. Tolerance of inequalities should become unacceptable to all political parties irrespective of their ideologies. We maintain that area-oriented policies and area-based services will substantially contribute to the improvement of health of ordinary individuals and the development of a healthy environment and, ultimately, to the quality of the total life-structure of the residents of Delhi and the city itself.

The Thrust of Development

The thrust of development, we think, now should be more on the amelioration of the condition of the squatter settlements and slum population. They have been neglected all these years. We have to bring them to the centre-stage from the periphery to which they were pushed. More so because they are central to the existence and growth of the city. They are essential components of economic, social and political lifeline of Delhi. **The slum dwellers should become an internal and integral part of the planning and under no circumstances should they be left to fend for themselves.** The basic amenities and services



should be provided to them immediately, as the conditions in which they are living are deplorable.

After all, the slum dwellers subsidise the living costs of the rich in the national capital. It is, thus, in the fitness of things that they get there due, a respectful and dignified ecosystem (an integrated system of

physical, environmental and social relations) or habitat to live in.

It is time that policy measures were directed towards the poor and the deprived areas on a priority basis rather than squandering it on the amenities and utilities for the rich. ❖



Struggling to Survive

DELHI AT A GLANCE

POPULATION

1.	Population	9,370,475
2.	Decennial Growth Rate (%) 1981-91	50.46
3.	Area (Sq.Kms.)	1,483
4.	Density of Population, 1991(per sq.km.)	6,319
5.	Percentage of urban population to total population (1991)	89.93
6.	Sex ratio (Number of females to 1000 males) 1991	830

VITAL RATES

7.	Crude birth rate per thousand population 1990	29.48
8.	Crude birth rate per thousand population 1990	6.36
9.	Natural growth rate per thousand population 1990	23.12
10.	Infant Mortality Rate (1990) (per 1000 live births)	32.66
11.	Immigration rate per thousand population (1981-91)	27.52

C. SOCIO-ECONOMIC STATISTICS

12.	Per capita income (1989-90)		
	i) At current prices (Rs.)		9,709
	ii) At constant prices,1980-81(Rs.)		4,902
13.	Literacy rates (%)		
		1991	1981
	Persons	76.09	61.09
	Male	82.63	68.40
	Female	68.01	53.07

D. MEDICAL FACILITIES

14.	No. of medical colleges (Allopathy)	4
15.	No. of hospitals (1991)	81
16.	No. of dispensaries (1991)	653
17.	No. of registered nursing homes (1991)	107
18.	No. of beds (1991)	20,636
19.	No. of doctors (1990)	3,196
20.	Area served per hospital (sq.kms.)	18.30
21.	Area served per dispensary(sq.kms.)	2.27
22.	Population served per hospital	115,700
22a.	Population served per hospital and nursing home	49,843
23.	Population served per dispensary	14,350
24.	Hospital beds per 1000 population	2.20
25.	Population served per doctor	2,833
26.	Total expenditure 1991-92 (Rs. in lakhs)	81,915
27.	Expenditure on health-1991-92 (Rs in lakhs)	4,936
28.	Percentage on health (1991-92)	6.0
29.	Per capita expenditure on health 1991-92(Rs)	50.73



SCROLL OF HONOUR/DISHONOUR: DELHI TOPS AMONG ALL MAJOR CITIES OF INDIA

- * Literacy rate
- * Percentage of male literates
- * The total area in square kilometre
- * Decennial growth rate of population
- * Migration rate of population
- * Number of vehicles per population
- * Number of registered motorised two wheelers
- * Fatalities in traffic accidents
- * Vehicular pollution
- * Incidence of crime per one lakh population
- * Incidence of rape per one lakh population
- * Incidence of murders per one lakh population
- * Incidence of attempted murder per one lakh population
- * Incidence of kidnapping and abduction per one lakh population
- * Incidence of theft per one lakh population
- * Incidence of criminal breach of trust per one lakh population
- * Incidence of cheating per one lakh population

ATTRACTIONS OF DELHI

- * National capital: a place of highly centralised polity
- * Cosmopolitan: great capacity to absorb many cultures
- * Opportunity: chances of tremendous social mobility and professional growth
- * Magnetic and mesmeric symbol of the old and the new India
- * Prospects for employment and to earn for a better life
- * Concentration of bureaucracies and administrative offices
- * Medical facilities with highly sophisticated infrastructure
- * Large number of universities, educational and professional institutions and centres of learning of good repute
- * The richest city in terms of highest per capita income
- * Physical characteristics of the city: high rise buildings, beautiful parks, shopping centres, places of tourist interest etc
- * A city with no major political disturbances
- * A city with a number of museums, libraries, cultural centres, exhibitions
- * Venue of international events: trade fairs, book fairs, conferences, sports, cultural performances, film festivals etc
- * Profusion of autonomous bodies : ICSSR, ICHR, ICCR, CSIR, IARI, ICPR, NBT, Sahitya Academy etc
- * Nerve centre for trade in North India
- * Headquarters of : UN organisations, bilateral and multilateral donor agencies, many NGOs, and voluntary organisations
- * A city with embassies and high commissions of all countries

GAPS

Gaps between demand for and supply of :

- * Sewage disposal
- * Sanitation
- * Toilets
- * Housing/transport requirement
- * Jobs
- * Electricity
- * Water
- * Doctors/Nurses
- * Ambulances/Fire Services
- * Blood Requirement
- * Immunisation

Gaps between:

- * Location of Hospitals in posh and slum areas
- * More services for few people and less services for many
- * Allopathic and Alternative Systems of Medicine
- * The users of Hospitals, Schools, Universities etc
- * Security coverage (Police) for posh and slum areas
- * Modern technology and traditional value (amniocentesis)
- * Sports complex and its use
- * Urban planning and its implementation
- * Various government measures and its implementation and effectivity
- * Modern gynaecological care and the use of TBAs (dais)
- * Number of garbage collection, transport and garbage collections done
- * Slums in a posh area and in a resettlement colony
- * Money spent on a VIP and a common person
- * The problems encountered by people and the responses (drives) of the Administration
- * The drives of the Administration and its efficacy
- * Slow moving and fast moving traffic on the same road
- * Life chances of an affluent and slum dwellers in getting the services of school, hospitals (for birth etc), ambulances (dying on road) living without electricity etc
- * The disease pattern of the affluent and the poor
- * Police stations and growth of crime
- * Objective planning and planning by sentiments (Samadhis and memorials turning the erstwhile land and houses into Ghats and Museums respectively).
- * Areas allocated for the Samadhis (the dead) and the living
- * Government Agencies and NGOs
- * GOs/NGOs and voluntary efforts of the locals
- * Research finding and information dissemination
- * Research finding and action

TABLE - 1
POPULATION ESTIMATES (IN LAKHS)

YEAR	PERSONS	MALE	FEMALE	SEX RATIO
1991	9,370.0	5,120.0	4,250.0	830
1992	9,729.3	5,313.0	4,416.3	831
1993	10,100.8	5,513.1	4,587.7	832
1994	10,482.4	5,719.2	4,763.2	833
1995	10,874.2	5,929.4	4,944.8	834
1996	11,272.0	6,141.6	5,130.4	835
1997	11,689.0	6,367.9	5,321.1	836
1998	12,111.0	6,595.2	5,515.8	836
1999	12,543.2	6,827.6	5,715.6	837
2000	12,981.4	7,063.0	5,918.4	838
2001	13,427.8	7,303.5	6,124.3	839

SOURCE : POPULATION STATISTICS 1991 - BUREAU OF ECONOMICS AND STATISTICS, DELHI ADMINISTRATION, DELHI.

already existing ones. The multiplicity of organisations responsible for the affairs of Delhi currently include the DDA, the MCD, the Delhi Administration, the NDMC, the Delhi Cantonment Board, the DESU, the DMS, the DTC, the MTNL etc. All of these are large bureaucracies with separate financial, administrative and management responsibilities. The task of coordinating plans, their implementation, monitoring and evaluation is enormous since there is no statutory apex body to do so. Coordination, in any case, cannot be forged by issuing circulars. It is an attitude of mind that emerges from efforts of trying to solve common problems together.

Delhi as a State

Delhi had its first general elections in the year 1952 and saw two Chief Ministers: Chaudhury Bramha Prakash (1952-55) and Nihal Singh (1955-56) serve it. Delhi ceased to exist as a state in 1956. Its administration was then entrusted to a Chief Commissioner. In 1966 the Delhi Metropolitan Council was set up to manage the affairs in collaboration with the Executive Council.

The First-Ever Master Plan of an Indian City



Hopelessness Wait large

It is not that efforts to make the system more efficient have not been undertaken. In 1962, Delhi's Master Plan was made. To overcome the problems of the city, the Plan recommended the development of Ring Towns-Ghaziabad, Faridabad, Ballabgarh, Gurgaon, Bahadurgarh, Loni and Narela. But these recommendations proved to be impractical since land is a state subject and the neighbouring states refused to cooperate. The dispersal of population, industries, government activities from Delhi remained a dream and the disorderly growth of Delhi continued unabated and the resulting problems have become a nightmare.

Although the Master Plan, 1962 was hailed as an important step in city planning, its actual impact in curbing the population flow into Delhi and in the provision of shelter for the urban poor was ineffective. It is a wasteful exercise to make plans if there are no systems to implement and monitor the recommendations and if there are no resources to translate such dreams into action.

Apart from its academic acclaim the Master Plan, 1962 only managed to outline Delhi's importance as a national capital, as a commercial and industrial centre and as a highly attractive place for political, industrial, cultural and similar other activities. But it failed to create mechanisms to check the population growth or the city getting congested with motorised vehicles or responding to the ever-increasing shortfall in the housing stock or creating more amenities, or preventing the construction of giant stadia for Asiad Games in 1982 along with luxury hotels, a residential colony and flyovers.

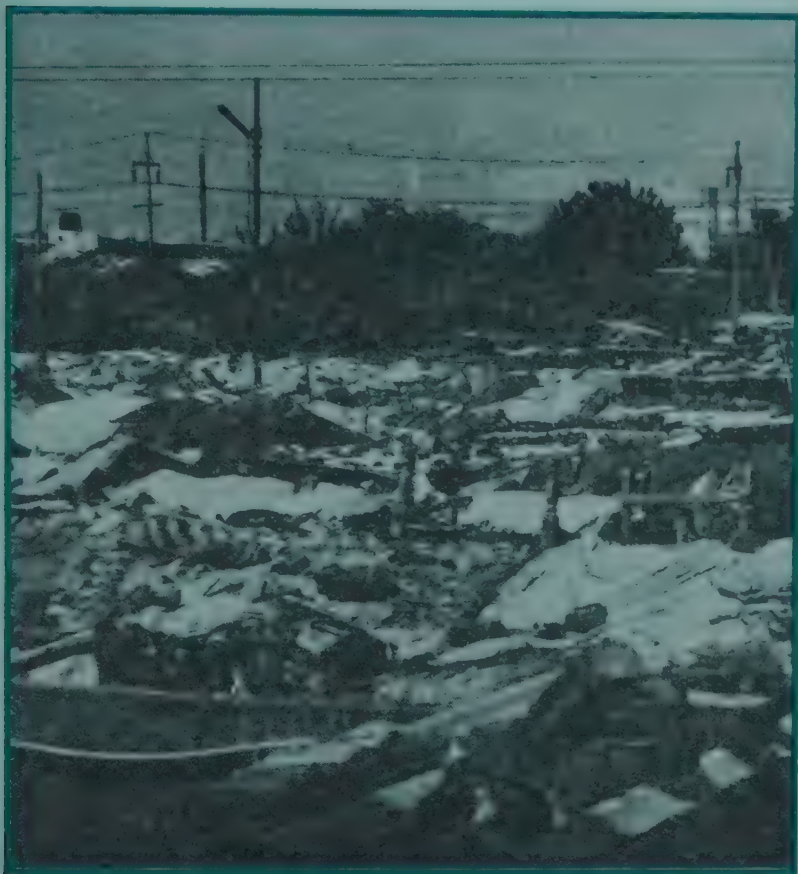
Death of Idealism

All previous attempts to predict the future of Delhi have failed. Its rate of growth has exhausted even the most optimistic planners. Those who had designed the Master Plan, 1962 miscalculated its feasibility. Planning is a necessary element in the management of any organisation but for a rapidly growing city it is all the more important. In order to implement the recommendations of planning exercises there is also a need for a single body responsible and accountable



for the outcome. Since no planning can be value-free it is essential to have well-defined goals and sufficient means to achieve them. Delays in action would destroy both idealism and enthusiasm.

A quarter of a century after the First Plan a revised plan for Delhi has been prepared. The new Master Plan for Delhi Perspective - 2001 acknowledges that in the development of Delhi land is a major constraint.



Co-existence?

It recommends low-rise high density development but without compromising on space and standards. The plan defines the role of the government as that of servicing land and facilitating shelter through individual efforts and the cooperatives. It recommends upgrading of deprived colonies and combining houses in neighbourhood for different income groups. It recommends distribution of employment and facilities.

An Urgent Case for a Single Coordinating Agency

There is an urgent need to create a tolerable future

of Delhi. The responsibility of evaluating various plans and proposals must be with a single agency which should coordinate the monitoring and implementation of the planned objectives also. It should be entrusted with the task of accumulating and using appropriate resources. Such an agency should be run on democratic lines and the powerlessness of those living in the deprived areas must be removed. Delhi's First Plan 1962 served only 60 per cent of the population while the remaining 40 per cent were left to survive on their own. It is hoped that the strategies recommended in the revised Plan would be relevant to the real needs of all residents of Delhi, but particularly to those who are fighting for their survival in deprived areas.



The Back Quarters of Development

All political parties engaged in activities at local level have been asking for an elected Assembly and its Council of Ministers for long since a number of authorities can only create confusion and chaos in the planning and implementation of services, in resource allocation and in responding to the real needs of the residents of Delhi. This lack of coordination between agencies as well as multiplicity of their hierarchies must be removed to streamline the management of Delhi's services, facilities and amenities. ♦

DELHI: A JOURNEY OF A LIVING LEGEND

15 CENTURY B.C:	Indraprastha, the legendary city of Mahabharat and the capital of Pandavs was built by Maya Danav on the western bank of the river Yamuna where now Purana Qila stands.	1351-1388:	Firozshah built the new capital known as Ferozabad. Jamuna canal was constructed to irrigate and was also used for transportation. Tamoor Lang plundered Delhi, and put an end to Tughlak Dynasty.
328 B.C:	Raja Dhulloo built the capital of his empire at the site off the ridge about 8 kms from Qutab Minar after whom it is said to have acquired its name Dilli (Delhi).	1398 :	
4th CENTURY A.D.:	Chandragupta II was the ruler of Delhi. His city was located towards Southern part of present Delhi and the iron pillar in Qutab Minar Complex is a living testimony of his rule.	1414-1432 :	The Saiyad Brothers, followed the Tughlaq dynasty.
972-1020 A.D. :	Lalkot was built by Tomar King Anangpal. Suraj Kund, the Sun Pool, is reported to have survived from his Kingdom.	1433 :	Kotla Mubarakpur, a settlement in South Delhi, was founded by Mubarak Shah.
1150 A.D.:	The city of Lalkot enlarged by Prithvi Raj Chauhan, the Rajput King and the fort was renamed Qila Rai Pithora.	1451-1526 :	Lodi Dynasty followed the Saiyad Brothers. In 1504 Sikander Lodi shifted the Capital to Agra.
1191:	Qutabuddin Aibak, the Slave Commander of Mohammad Ghauri captured Delhi. This was the beginning of the Delhi Sultanate.	1526 :	Battle of Panipat, Mughal Dynasty began its rule, the foundation of Delhi's medieval glory by Babar.
1206 :	Qutabuddin Aibak became the first Sultan of Delhi. The construction of Qutab Minar, the most dominating symbol of Delhi, was started by him and completed by Iltutmish, a slave of his who succeeded him.	1530 :	Humayun succeeded Babar and built the fort 'Din Panah' on the site of legendary Indraprastha.
1236-40 :	Iltutmish was succeeded by his daughter Razia Sultan, who was dethroned by Balban.	1540 :	Sher Shah fortified Purana Qila and called the city as Shergarh.
1286-90 :	Muizzuddin Khilji succeeded the Sultanate of Delhi from the slave dynasty.	1550 :	Salim Shah, son of Sher Shah, built Shergarh fort on the bank of Yamuna adjacent to the present Red Fort.
1296 :	Allauddin Khilji, son of Jalaluddin, succeeded to power and built his capital at Siri.	1555 :	Humayun regained his throne but died soon afterwards. His son Akbar shifted the capital to Agra.
1321 :	Tughlaqabad was founded as a city by Ghayasuddin Tughlaq. A smaller Adilabad Fort was also built and connected to Tughlaqabad by a causeway.	1565 :	Humayun Tomb was built by his widow Haji Begum.
1334-1351:	Mohammad Tughlaq transferred the capital to Daulatabad in South India. A new city, Jahanpanah, located between Mehrauli and Siri was built by Mohammad bin Tughlak.	1603-1627 :	Jahangir, Son of Akbar, shifted the Capital to Lahore.
		1638 :	Emperor Shahjahan moved the capital back to Delhi, Shahjahanabad was built.
		1639 :	Red Fort was built by Shahjahan.
		1670 :	Aurangzeb wrested the rule from Shahjahan.
		1707 :	After the death of Aurangzeb in 1707, Bahadur Shah shifted the capital to Lahore.
		1719 :	Maharaja Jai Singh of Jaipur built the Jantar Manter, an observatory complex of pure geometrical forms to chart the astronomical movements of planets.

1739 :	Nadir Shah defeated Mohammad Shah at Panipat and entered Delhi. He massacred the inhabitants and carried away the celebrated Peacock Throne and the Kohinoor Diamond.	1912 :	Delhi became the Seat of the British Government in India.
1757 - 1788 :	Afghan adventurer Ahmad Shah Abdali and his successor Mohammad Shah Alam ruled the Capital.	1921 :	India Gate was built to commemorate the 90,000 Indian solidiers who lost their lives in the First World War protecting the British Empire.
1793 :	Ghulam Qadir, the Rohilla Chief became the ruler.	1925 :	New Delhi Municipal Committee was constituted.
1803 :	Scindias were defeated by General Lake of East India Company. Col. Ochter Lony was appointed by the Company as the first Resident of Delhi.	1927 :	Parliament House, designed by Herbert Baker, completed.
1829 :	St.James Church was built.	1930 :	Lutyen's New Delhi inaugurated. Total population of Delhi was 8 lakh.
1843 :	The population of Delhi grew to be 1.13 lakh.	1947 :	After the partition and Independence of India, Delhi witnessed largest influx of refugee migrants. About 5 lakh refugees sought shelter in capital city raising its population to double in just two months.
1857 :	The first struggle for political freedom against the British took a violent turn. Emperor Bahadur Shah Zafar was imprisoned in the Humayun Tomb Complex.	1948 :	Father of the nation Mahatma Gandhi assassinated on 30th January.
1858 :	Civil government was installed in Delhi. Delhi transferred from North-west province to Punjab and Delhi District was founded. British Crown assumed the government of India from the East India Company.	1952- 1956 :	First Legislative Assembly was formed. Chaudhary Brahma Prakash became Delhi's first Chief Minister, followed by Nihal Singh (1955-56).
1863 :	The first meeting of Municipal Commission was held on 23rd April. At that time, city was confined to an area of two square miles with 1.21 lakh inhabitants.	1957 :	Delhi Development Authority was set up to carry out the planned Development of capital city as its main objective.
1870- 1873 :	The railways were introduced in Delhi. Rajputana State Railway started trains between Delhi and Bombay. The first street light was introduced with lantern and lamp posts.	1958 :	The first Municipal election was held and as an elected body Delhi Municipal Corporation came into existence on 7th April.
1877 :	Queen Victoria was proclaimed the Empress of India at the Delhi Durbar.	1962 :	First Master Plan for Delhi approved.
1907 :	Population became two lakhs.	1982 :	IX Asian Games held, six new stadia and seven flyovers constructed.
1911 :	On 12 December, King George V, Emperor of the British Empire, proclaimed his decision to move the capital of India from Calcutta back to Delhi.	1984 :	Prime Minister, Mrs Indira Gandhi assassinated. Anti-sikh riots broke out.
		1985 :	National Capital Region (NCR) Planning Board Act passed.
		1987 :	Interim Development Plan 2001 National Capital Region prepared. Second Master Plan for Delhi updated upto the year 2001.
		1993 :	Assembly elections in Delhi on 6th November.

BETTER DEAD THAN LIVING

Samadhis		Land in Acres (Total 300 acres)
* Rajghat	: Samadhi of Mahatma Gandhi, Father of the Nation	40
* Shantivana	: Samadhi of Jawaharlal Nehru]	
* Vijayghat	: Samadhi of Lal Bahadur Shastri]	60
* Shakti Sthala	: Samadhi of Indira Gandhi]	
* Kisanghat	: Samadhi of Charan Singh	20
* Veerbhumi	: Samadhi of Rajiv Gandhi	60
* Samta Sthala	: Samadhi of Babu Jagjivan Ram	5
* Estimated area reserved for future samadhis		115
* Annual expenditure on maintenance and landscaping of these samadhis incurred by PWD		Rs. 50 Lakh

"Delhi Will Be The Biggest Slum In The World By 2001 AD

- Madan Lal Khurana, South Delhi M.P. on Delhi

Nobody is bothered about the National Capital Region (NCR). In 1992 a sum of Rs.10 crore was earmarked for it whereas it should have had a thousand crore. Neither the States nor the Centre have taken the plan seriously. The satellite towns which were supposed to come up have yet to see the light of the day.

Delhi is being ruled by the joint secretaries and deputy secretaries of the Central Government who are not accountable to the people of Delhi but only to the Central Government. There is small wonder that the Master Plan for Delhi - 1982-2001 was accepted as late as 1990. The twenty year plan for the development of Delhi got accepted after eight years and the zonal plans are not complete as yet. Twelve precious years have been wasted with regard to zonal plans. How much time should be taken in making plans? The city planning must be done twenty years in advance. In the Sixth Five Year Plan, seven 100-bedded hospitals were planned for villages and resettlement colonies of Delhi, of these only one has started to function. The Eighth Five Year Plan has already begun but the remaining six hospitals are nowhere in sight. All this has been happening because there is no one to represent Delhi's case.

Delhi's condition will improve after the elections. Delhi has developed because of the private enterprise. All round and comprehensive development does not exist. Of the one crore people of Delhi if 65 lakh people do not have basic amenities, then its development is faulty?

According to WHO pollution is at a dangerous level in Delhi. The number of vehicles is the highest when compared to other major cities. Moreover, unauthorised colonies have sprung up, jhuggi-jhonpuri (JJ) clusters (929), have mushroomed. Of the 65 lakh people living in sub-standard areas and condition:

- * 15 lakh live in 929 J.J.Clusters
- * 15 lakh live in 1000 unauthorised colonies

- * 15 lakh live in 44 Resettlement colonies
- * 10 lakh live in Katras, Paharganj, Sadar and walled city, and
- * 10 lakh live in slums.

They are provided with hardly any basic amenities such as electricity, water, latrines, flooring, sewerage, sanitation etc. Their lives have become hell as a result of:

- * Increase in crimes
- * Law and order problems
- * Land grabbing
- * Trafficking in drugs
- * Bootlegging etc

J.J. Clusters have come up in the vicinity of all authorised and regularised colonies. Since basic amenities are not there so they defecate in the open on roads. The DDA is responsible for the shortfall in houses. For every one lakh housing units (four persons per one unit) needed the DDA develops only 5000 units. The gap is already there and continues to increase. The DDA should give land to the corporate sector for development. Of all the land which has been encroached one-third can be given to the slum dwellers and the rest can be developed and sold. No proper planning has been done. In Delhi planned development is not taking place. There is a need for decentralisation.

Delhi's health service has not increased as far as hospital care is concerned. Large hospitals like the Hindu Rao, Lady Hardinge, Lady Irwin, Safdarjung had started in the pre-Independence period. After 1947 AIIMS was set up. Two more hospitals came up later on; one in the East (Guru Teg Bahadur Hospital) and the other in the West (Deen Dayal Upadhyay Hospital) during 1977-1980 period.

In Raghubir Nagar in West Delhi the foundation stone was laid for a 100 bed hospital in 1991. Till today no construction has taken place.

While highlighting the availability of bed per 1000 population the government includes the facilities in the private nursing homes as well. Everyone knows that the poor cannot approach private nursing homes for treatment. The prices of medicines and drugs have increased by 300 per cent or more. Most facilities and services offered by the government hospitals are being charged. The poor in Delhi have no hope so far as the health services are concerned. Their reach is very limited and they get left out from the coverage offered by the health services.

The other problem with the government hospitals is the non-use, of sophisticated equipment. For instance, in Deen Dayal Upadhyay Hospital, Dialysis and Catscan machines were procured in 1991. These are inoperational due to the non-availability of airconditioners. This amounts to criminal negligence. What happens is that the employees of the hospital refer the cases to the private nursing homes and collect their commission for performing their 'Duty'.

The Deen Dayal Upadhyay Hospital was started with an intention of having both the allopathic and the indigenous systems of treatment, but primarily for the ayurvedic system. The aim was to have 200 beds for the ayurvedic treatment and the remaining 300 beds for the allopathic treatment. But this never happened. All the 500 beds in the hospital are for the allopathic treatment.

There are two Delhis:-

- * VIP Delhi, and
- * Gharib Delhi.

Delhi's future is bleak. By the year 2001 Delhi will be the biggest slum in the world.

"Delhi is Heading for a Disaster"

- Jagmohan, M.P. (Rajya Sabha) and former Lt. Governor of Delhi, on Delhi

There are two factors which mould policies on urban development:

- * City Planning and
- * City Development

What is applicable to the western countries is not at all useful to us. 70 per cent of our population resides in rural areas. Our problems are peculiar. So our policies have to be suited to our own requirements. We require comprehensive planning. This means that we will have to earmark land likewise:

- * 40 per cent residential
- * 20 per cent green
- * 20 per cent industrial
- * 15 per cent institutional

To facilitate this there has to be complete control on urban land which should be used as an asset. There is land which is required for institutional area, playgrounds, public utility services, electricity supply etc. To make use of the urban land enhance the value of the land. The resources of the city are limited along with budgetary constraints. Sufficient money is not available for water, electricity, transportation etc. All these expenses must be afforded by somebody. The only feasible way is to make use of the urban lands. You should make proper valuation of the land and invest in the city development. Delhi's transport and public amenities can be financed by the urban land. With comprehensive planning and control over the urban lands we can plan city structure properly. If the city development is planned properly, the health problems are taken care of.

In implementing policies and programmes, we found that 70 to 80 per cent of the people are either slum dwellers or from low income groups. To give economic support, they should be given land in proportion to their needs. There must be complete control over the urban land and it should be provided on nominal rates to the low income groups.

Tenure as Lt. Governor

During my tenure as Lt. Governor of Delhi (1980-81 and 1981-82), I restored the historical and architectural legacy by removing the slums in the vicinity of monuments. I got trees planted in all historical places and near the monuments. By promoting the greenery I protected not only the monuments but also the environment. I had suggested that playgrounds and other similar facilities should be provided in such places so that children can go and play there. Thus, if such places are utilized more properly one can really achieve a lot.

So far as health within the city is concerned, social aspects affect it a lot. Without strong political will and public awareness one cannot achieve appropriate results. Comprehensive approach is more important. People must get more of electricity, public utilities, water and sanitation, urban land etc.

I had offered the community near Jama Masjid to shift to other place but due to political considerations, it could not materialise. At the same time I had been able to shift 1700 kabadis from Turkman Gate to Naraina Industrial Estate. Their situation now, as a result, is good and they have properties worth 70 to 80 lakhs. On the other hand, the community illegally living near Jama Masjid is living in even more severe and deprived condition today than before.

I had acquired 42,000 acres of land for residential use during my tenure as Mrs. Indira Gandhi was backing me and I could plan something with that land. After that no land has been acquired in Delhi for such purposes.

Settlement of Urban Poor and Illegal Constructions

This is a crucial problem. Policies are there since long but there must be a strong political and administrative will and public motivation to implement them. Politicians sometimes look for wrong kind of support. The problem of the implementation of schemes, plans, programmes is an acute one. You have to swim against the current. Politics currently is at very low level. A city is a by-product of its culture. Delhi represents the political culture of our country.

Some of the illegal constructions are supported by some political party's or some corrupt officials. There seems a competition in defending illegality. Government as well as public know this. If you want to remove them, they will oppose and get political backing. If the slum dwellers live in filthy situations and surroundings their economic productivity will be low. It is very important for policy makers to see that such people live in clean environment, in small houses and should be provided with schooling and other facilities.

Other problems are due to indiscipline. There are illegal constructions which have no sewerage and drains. All speculators and colonisers have made money. **In most government offices there is money making, there is corruption. There is an all round deterioration of values.** It is unfortunate to see that Delhi is blocked in by farm houses owned by rich people. There are lots of farm houses in the city and on the other hand there are a lot of people living in 1000 JJ clusters. There are also other people who are striving hard to get a piece of land and have a roof over their head. The cost of land has increased tremendously and it is beyond the means of middle class/lower class to think of having a house. Thus, health of community is getting affected severely. Government spends crores on health but does not provide clean environment which prevents ill health.

Migration

People leave their native places seeking employment in the cities where they live in high density places lacking proper utility services. These conditions result in their ill-health.

Migration is due to the un-absorbing capacity of the villages, unemployment and poverty prevailing there. 28 per cent of rural population is landless. Even those who own land cannot earn their livelihood due to lack of irrigation facilities, recurrent droughts, etc. The poor migrate to the cities in search of employment.

When I was Lt. Governor of Jammu and Kashmir, I saw people from Bihar working as labourers in Laddakh where temperature was minus 22 degree celsius. It is due to poverty that people migrate to such far flung areas and put up with severe hardships.

Jhuggi-Jhonpri Problems

The jhuggi-jhonpri problem is again a crucial one for Delhi. Every town planner is aware of it. The community, living in the jhuggi colony, is severely affected due to the lack of public utilities. They defecate on sides of the road near the jhuggis, which badly affects their health. Through the use of appropriate technology, human waste can be converted into energy so that pollution could stop and we may get some energy out of this.

The loss due to fire in jhuggis is known to everybody. However, there is no concrete plan to avert such tragedies. Every year we read in the newspapers reports of fire in jhuggis which are constructed with such raw material that get destroyed by fire easily. Fires are frequently caused by short-circuit, cooking of foods etc. Good quality of raw material should be used to prevent fires.

Garbage

The uncollected garbage left here and there affects health. Public awareness and strong political motivation are

required to make Delhi clean. People should know what causes ill-health. For example, in the morning people go to hospital for treatment. The problem is taken care through medicine but in the evening due to improper sanitary conditions, they are unwell again and return to the hospital. This is mostly because of dirty latrines, bad food, lack of public utilities and amenities etc.

Red Line Buses

Everyone is aware that Red Line buses are killing people of Delhi and their negligent overtaking results in accidents. But there is no strong will to take action against them. **Apathy is a part of our national ethos. In every aspect of life there is apathy. This has become part of our culture.** On many occasions, I have raised questions in the Parliament demanding effective services from the Municipal Corporation of Delhi. But only promises are made, no action takes place.

Stadia

Our schools lack playgrounds. Interested students should be encouraged to play in various stadia of Delhi. The schools should organise games and sports and bring children to these stadia so that these can be put to good use.

Dispersal of Government Offices

In the Master Plan of 1962, the dispersal of government offices was suggested, but it has not been implemented to date.

Measures Towards Improvement

- * improved planning,
- * balanced growth,
- * resource creation within the city,
- * effective implementation,
- * urban land control,
- * new institutional areas,
- * urban discipline, and
- * regional policies for human settlement technologies.

We should re-distribute population in rural/urban areas. Then, the health of people will automatically improve. For that purpose our villages must get employment facilities in terms of small-scale industries. The implementation of the plans we make is essential.

Delhi has both the highest and the lowest density in the world (10 to 15 person, per sq. km. in Prithviraj Road and 1400 per sq. km. in Dariba Kalan). In city planning a lot of imagination is required.

The cost of having metro in order to improve traffic position in Delhi will be very high. The subterranean hard rock of this region would escalate the costs of metro. The metro will not be cost effective.

There are two Delhis:

- * Delhi of the affluent, and
- * Delhi of the poor.

Elections in Delhi will not really affect the situation. Delhi is heading for a disaster. Its future is bleak.

TABLE 1
POPULATION OF DELHI TERRITORY 1901 TO 1991

Year	Persons	Male	Female	Decennial Growth Rate	All India	sex ratio (females per '000 males)	All India
1	2	3	4	5		6	
1901	405,819	217,921	187,898	-	-	862	872
1911	413,851	230,865	182,986	1.98	5.75	793	964
1921	488,452	281,777	206,675	18.03	-0.31	733	955
1931	636,246	369,497	266,749	30.26	11.00	722	950
1941	917,939	535,236	382,703	44.27	14.22	715	945
1951	1,744,072	986,538	757,534	90.00	13.31	768	946
1961	2,658,612	1,489,378	1,169,234	52.44	21.51	785	941
1971	4,065,698	2,257,515	1,808,183	52.93	24.80	801	930
1981	6,220,406	3,440,081	2,780,325	53.00	24.66	808	934
1991	9,370,475	5,120,733	4,249,742	50.64	23.50	630	929

Source: Population Statistics 1991-Bureau of Economics and statistics, Delhi Administration, Delhi.



PROFILE OF "TWO CITIES" IN DELHI: DEMOGRAPHIC, HEALTH, EDUCATION AND HOUSING

Delhi, with its glossy glitter of the present and the classy imperial past, continues to grow with a speed which perhaps is the fastest in the world. The decennial growth rate of 50.46 per cent between 1990-91 was not entirely unexpected. The obvious reason for such an increase of population in the capital city is the large influx of population from all over the country in search of greener pastures. Most of them find only a small piece of land to sleep and they later on create a jhuggi to live in, which becomes an eye sore for the metropolitan elite and authorities. It is estimated that about 2.5 lakh persons arrive in Delhi each year in search of work where there are already more than 3 lakh unemployed persons. How far the planners of this beautiful city were aware of the problems Delhi would face? Have the poor been provided for in Delhi's future plans? Do they deserve attention as much as the diplomats who come to establish international relationship? As human beings they certainly do but the legacy of democracy and class distinction left by the Westerners does not allow our planners to do any social justice and treat the two classes as equals.

Plan Outlay

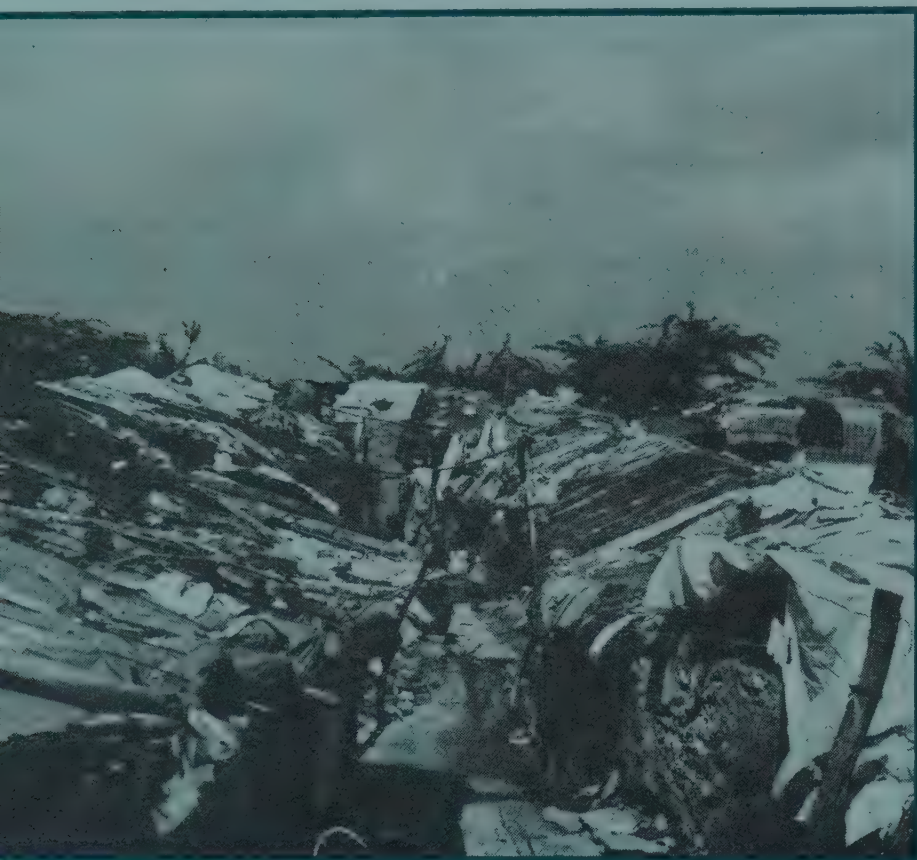
The dichotomy is obvious in every way. The gaps are glaring everywhere but in health they are even more apparent. As it is, health is the last amongst the six priority issues in Delhi's approved plan outlay for 1992-93 of Rs. 920 crores. Energy retains top priority for the next five years being Rs 275 crores (Table 1), general education is Rs.72 crore and health is only Rs 65 crore.

In other developing countries four per cent of the total government expenditure is on health. In India

TABLE - 1
EXPENDITURE ON VARIOUS SECTORS
DURING SEVENTH PLAN, 1991-92
AND 1992-93

SECTORS	SEVENTH PLAN (1985-90)	ANNUAL PLAN (1991-92)	APPROVED OUTLAY (1992-93)
(RUPEES IN LAKHS)			
1. Energy	83,886.28 (31.9)	22,374.15 (27.3)	27,500.00 (29.9)
2. Transport	36,368.92 (13.8)	12,700.38 (15.5)	13,200.00 (14.3)
3. Water Supply & Sanitation	32,662.08 (12.4)	13,513.42 (16.5)	13,200.00 (14.3)
4. Housing	12,206.65 (4.6)	3,096.20 (3.8)	2,500.00 (2.7)
5. Urban Development	31,166.39 (11.8)	10,482.72 (12.8)	11,700.00 (12.7)
6. Nutrition	2,372.41 (0.9)	507.91 (0.6)	700.00 (0.8)
7. Medical Health Services	20,720.46 (7.9)	4,935.61 (6.0)	6,500.00 (7.1)
8. Other Sectors (agriculture, rural development, industry, education, PWD etc.)	43,764.11 (16.7)	14,304.78 (17.5)	16,700.00 (18.2)
Total :	263,147.04 (100.0)	81,915.17 (100.0)	92,000.00 (100.0)
Source : Delhi Quarterly Digest of Economics & Statistics, Bureau of Economics & Statistics, Delhi Administration.			
Note : Figures within brackets are percentages of the total outlay/ expenditure.			

it is only two per cent. In Germany, it is 18 per cent, in France 14 per cent, and in the U.K. it is 12 per cent. India has been showing a constant decline in its health budget. It was 3.3 per cent in the First Plan and was reduced to 1.9 per cent in 6th Plan. It has shown slight improvement in the Eighth Plan. The per capita expenditure on health in India is only Rs.21, of which 75 per cent is spent on medical colleges and big hospitals leaving very little for the poor. Delhi is in a somewhat better position in this respect. It has 6 per cent of the total outlay budget allocated for health and the per capita expenditure in Delhi is around Rs.50.73 (Delhi at a Glance).



Tribute to Planners

Current and projected patterns of growth of urban population and the proliferation of urban slum and squatter settlements offer a challenge to the planners. They pose a major problem to health unless basic amenities are provided to them. Urban population, and its needs for housing, community services and health care facilities outstrip the resources available not so much because of their scarcity but more because of their mal-distribution. The accelerating process of urbanisation is haphazard and cha-

otic. Homeless immigrants who come to Delhi tend to occupy land near their place of work and establish squatter settlements. Most of these live in overcrowded, self-made shelters with an almost absence of water and sanitary conditions. Rotting garbage, human faecal matter and associated insect and rodent infestation are a common sight in the slums. The provision of safe water supply is very important. This single service can at least be undertaken for improving the health of the people, wherever they live. In Delhi with the future of the Tehri Dam being still hazy the water scenario is bleak. Most of Delhi's water need would be met by Haryana if the State agrees to this arrangement.

No new scheme has been listed in the urban development plans although the stress has been on *improvement of civic amenities* specially for jhuggi-jhonpris. Since health is the last of all priorities the Plan has as yet not given any special attention to it.

The Decennial Growth

As can be seen from the Tables 2 and 3 the rate of growth of Delhi has been twice as that of the country as a whole. The male-female ratio is much lower in Delhi than in India because of the substantial presence of immigrant male population.

TABLE - 2
DENSITY OF POPULATION

CENSUS YEAR	DENSITY (PERSONS PER SQ. KM.)	
	DELHI	ALL INDIA
1901	273	77
1911	279	82
1921	318	81
1931	429	90
1941	617	103
1951	1,165	117
1961	1,792	142
1971	2,738	177
1981	4,194	216
1991	6,319	267

SOURCE: POPULATION STATISTICS 1991 - BUREAU OF ECONOMICS AND STATISTICS, DELHI ADMINISTRATION, DELHI.

TABLE - 3
POPULATION AND DENSITY OF VARIOUS ZONES

ZONES	AREA (SQ.KM.)	POPULATION		PERCENTAGE INCREASE	DENSITY (PER SQ.KM.)	
		1981	1991		1981	1991
Delhi Municipal	614.52	5,409,998	8,038,608	48.59	13,547	16,643
Corporation (Urban) Delhi Municipal	782.77	452,206	943,392	108.62	578	1,183
Corporation (Rural) NDMC	42.74	273,036	294,149	7.73	6,388	6,882
Cantonment Area	42.97	85,166	94,326	10.76	1,982	2,195
Total	1,483.00	6,220,406	9,370,475	50.64	4,194	6,319
SOURCE: 1) BUREAU OF ECONOMICS AND STATISTICS, DELHI ADMINISTRATION, DELHI. 2) CIVIC GUIDE, MUNICIPAL CORPORATION OF DELHI, DELHI.						

It is estimated that by 2001 AD Delhi's ten million population will become 30 million or more. The density of population in Delhi per square metre in 1991 was 6,319 in comparison to 267 of India. It is more than twenty-folds. Delhi with large immigrant population has more serious problems that go with urbanisation.

Literacy

Literacy-wise Delhi's population is relatively more educated than other parts of India. Of the total 76 per cent literacy in Delhi, 82 per cent males are literates and 68 per cent females, in comparison to 63 per cent of male and 39 per cent of the female literates in the country as a whole (Table 4). In spite of improved female literacy rates, Delhi has not done any better in health matters, IMR being 32.6. Delhi has the highest per capita income of Rs.4,902, more than even Goa which has Rs.3,678 per head. Despite that all other health parameters of Delhi are much more distressing than Goa and Kerala. Delhi has higher percentage of the productive age group (15-59 years) 60.5 per cent of the total population in comparison to 53.9

TABLE 4
LITERACY RATE BY SEX 1961-91
(PERCENTAGE)

Year	Total Delhi	Male All India	Female Delhi	All India	Delhi	India
1961	52.75	24.00	60.75	34.40	42.55	13.00
1971	56.61 (7.3)	29.45 (22.7)	63.71 (4.9)	39.18 (13.9)	47.75 (12.2)	18.70 (43.9)
1981	61.54* (8.7)	43.56* (47.9)	68.40* (7.3)	56.37* (43.9)	51.07* (12.7)	29.75* (59.1)
1991	76.09* (23.6)	52.11* (19.6)	82.63* (28.2)	63.86* (13.3)	68.01* (33.2)	39.42* (32.5)
Source : Population Statistics, 1991, Bureau of Economics and Statistics, Delhi Administration, Delhi and year book, Family Welfare Programme, Ministry of Health and Family Welfare.						
Note : Figures within brackets are percentage increase as compared to preceding decadal year.						
* Percentage of literates to population aged 7 years and above.						

per cent in the country (Tables 5 and 6).

TABLE 5
PERCENTAGE DISTRIBUTION OF
POPULATION OF DELHI
BY AGE (1981)

AGE GROUP	MALE	FEMALE	PERSON	ALL INDIA
0-14	33.9	37.6	35.5	39.6
15-39	46.4	44.1	45.3	38.1
40-59	15.3	13.7	14.7	15.8
60+	4.4	4.6	4.5	6.5
TOTAL	100.0	100.0	100.0	100.0
Source: Delhi Statistical Handboom, 1992, Bureau of Economics and Statistics, Delhi Administration, Delhi				

To appreciate the health care system of the metropolitan city which is also the Capital of the country, it is not necessary to get over involved with statistics. However to get an impression of the state of health of Delhi the following information in Table 7 may be useful (1991 figures).

TABLE 7
STATE OF HEALTH IN DELHI

	Delhi	All India
Population	9,370,475	843,930,860
Literacy rate		
Male	82.6	63.8
Female	68.0	39.4
Crude death rate	6.4	9.7 (1990)
Crude birth rate	29.5	30.2 (1990)
I M R	32.6	91 (1989)
Hospitals	81	11,254
Number of beds	20,366	6,19,433
Available number of beds per 1000 population	2.2	0.74

TABLE - 6
PERCAPITA INCOME AT CONSTANT
PRICES OR VARIOUS
STATES/UTs' (1989-90)

States/UTs	Percapita Income	Rank
Andhra Pradesh	1692 *	16
Arunachal Pradesh	2199	9
Assam	1516	22
Bihar	981	24
Goa	3678	2
Gujarat	2629	8
Haryana	3193	6
Himachal Pradesh	2098	11
Jammu & Kashmir	1804 *	14
Karnataka	2109	10
Kerala	1560	20
Madhya Pradesh	678	25
Maharashtra	3281	4
Manipur	1702	15
Meghalaya	1515	23
Orissa	1557	21
Punjab	3658	3
Rajasthan	1620 *	17
Sikkim	2678 *	7
Tamil Nadu	1864	13
Tripura	1611	18
Uttar Pradesh	1572	19
West Bengal	1930	12
Delhi	4902	1
Pondicherry	3225	5
All India	2148	

* = Figure for 1988-89

Source: Delhi Statistical Hand Book, 1992 bureau of Economic & Statistics, Delhi Admn., Delhi.

Delhi is the only urbanised territory having 93 per cent urban population. It also has a large network of medical and health services. There are many organisational, managerial and technical problems with the health care services in Delhi. There are multiple authorities responsible for delivering different services relevant to health care without any

co-ordination. The links between agency supplying water, and the one that is responsible for sanitation is hardly any. No drains can be kept clean without water and this task cannot be achieved without any coordination particularly when there are acute shortages in the supply of water.



Jewel of the slums

Medical Institutions and Health Care Profile

There are 81 government hospitals and 107 registered private nursing homes distributed in various parts of the city (Table 8). The total number of beds, including the ones in government nursing homes and private nursing homes are 10,600. This gives a figure of 454 persons per bed or 2.2 beds per thousand population against the WHO recommendation of six beds per thousand population. The distribution of these beds are shown in Table 9. It is clear that in the Cantonment and NDMC areas there are 10 and 15 beds per thousand population respectively in comparison to just less than two beds per thousand population in the MCD area. The same variation can be seen in the distribution of dispensaries.

The mal-distribution is not only with respect to the geographical location of these facilities but can be observed even in the number of beds for children. Of a total population of 93 lakh, 35 per cent are children but children's beds are only 9 per cent of the total available beds. There is one bed per 2,000 children in Delhi. Same is true of beds for female which are little more than one per 1,000 women in Delhi.

TABLE 8
MEDICAL INSTITUTIONS IN DELHI
(1991)

Institutions	Govt.	Local Bodies	Others	Total
Hospitals	27	22	32	81
Dispensaries	305	199	143	653
MCH Centres	3	193	7	203
Primary Health Centres	3	5	—	8
Poly Clinics	9	1	—	10
Private Nursing Homes	—	-	107	107
Special Institutions	13	17	15	45
Total				1107
Source: Directorate of Health Services, Delhi Administration, Delhi.				

The number of beds are much more in South Delhi and Central Delhi, that is, *privileged Delhi* than in East Delhi, that is, *deprived Delhi* where the number of beds are very few. In Delhi there obviously are two cities, distinctly different from each other in terms of allocation of resources, facilities and services. The doctor population ratio is also mal-distributed. In Jhuggi-Jhonpris due to their cultural differences, there are few doctors of modern medicine available. Most of the people from the Jhuggi-Jhonpris areas go to the local practitioners who may be plenty in numbers but are not qualified and they treat them according to their own ignorance and greed for money.

Health Services in Delhi

There are three agencies dealing with health, the MCD, the Delhi Administration's Directorate of Health Services, and the NDMC. Delhi Administration runs the general health services, while the MCD and NDMC provide the maternal and child health and family planning services through urban health and family welfare centres. The sanitation and con-

TABLE 9
NUMBER OF HOSPITALS AND NURSING HOMES IN DELHI (1991)

ZONES	No. of Hospitals	No of Beds	No. of Pvt Nurshing Home	No. of Beds & Nurshing	Total no. of Hospitals Hospital/ Nurshing Homes	Total no. of Beds per 1000 population	Population per	No of Beds	Population per bed
MCD	70	13175	105	2131	175	15306	51326	1.70	587
NDMC	9	4424	2	3	11	4427	26740	15.05	66
CANTT	2	903	--	--	2	903	47163	10.26	104
NDMC & CANTT	11	5327	2	3	13	5330	29883	13.72	73
COMBINED									
Total	81	18502	107	2134	188	10636	49843	2.20	454 *

SOURCE: DIRECTORATE OF HEALTH SERVICES, DELHI ADMINISTRATION (FOR BASIC STATISTIC)
* ONE OF THE HIGHEST IN THE COUNTRY (KERALA 427, ANDAMAN & NICOBAR 399, GOA 383)

trol of communicable diseases and other surveillance activities are the responsibilities of MCD and NDMC. There are also activities that go at the level of Central Government's, Ministry of Health. There is a health insurance scheme for government employees known as CGHS, starting from the lower levels to the highest official. The health care of employees in the organised sector is also being looked after by Employees Health Insurance Scheme. Railways and Defence personnel have their own health care system in Delhi. There are four medical colleges with 1,000-1,500 beds and 81 government hospital and 107 private nursing homes.

Despite the multiplicity of the health care services, a strong private sector has emerged in the field. But even with this addition there is no visible improvement in the fair distribution of services for the rich and the poor.

Availability of Health Care Services in Slum Areas

It is difficult to fully understand the quality or the

quantity of health services available to the slum population without knowing the situation of slums in Delhi. Till 1990 there were more than 929 known squatter settlement colonies known as J.J. Bastis with 13 lakh population.

Resettlement colonies that came into existence in 1975-77 are 44 in number and contain three million population. Apart from the above, there were 480 unauthorised colonies in Delhi and more and more are coming up making almost 53 per cent of the total Delhi population living in sub-human conditions of the Delhi slums. The outcome of a few selected studies describes the type of health service available in slums. Like in Mangolpuri slums, maternal and child health as well as urban family welfare and ICDS services are available but in Seelampur neither these facilities nor other civic amenities are provided. Seelampur's condition is deplorable, as is of many other colonies.

Utilisation Patterns in Health Care

To identify the trends in the utilisation patterns in



health care for users of private and government medical services, the resorting patterns for medical services of users of different income, occupation, and education backgrounds were studied by VHAI in Nand Nagri, a resettlement colony in East Delhi (VHAI, 1993).

Patterns of Usage or Resort

Table 10 shows different types of treatment resorted to by 20 users selected from the Nand Nagri resettlement area. According to the study, there is a clear preference for a private practitioner for the initial treatment, i.e. the first visit to a doctor for diagnosis.

TABLE 9.
RESORT PATTERN FOR DIFFERENT
TYPES OF TREATMENT
Users from Nand Nagri resettlement
colony

Sample=20	Initial Treatment	Minor Ailment	Major Ailment	Surgery	MCH	Hospita- lisation
a-Private Practitioner	12	12	1	—	—	—
b-Government Hospital	4	7	7	10	12	16
c-Private Nursing Home	—	—	5	5	2	2
a/b	4	1	—	1	—	—
b/c	—	—	7	4	—	2
Home Treatment	—	—	—	—	5	—

While 60 per cent were for the private practitioner, 20 per cent were for government hospital and 20 per cent were indifferent. For minor ailments too a majority, that is 60 per cent, goes to private practitioners and 40 per cent to the governmental hospitals. For major ailments, the pattern changes with an equal number in favour of government hospitals or are indifferent in their choice between government hospitals and private nursing homes. Only one respondent was in favour of a private practitioner. For surgery and hospitalisation there was a clear majority in favour of government hospitals (50 per cent cases for surgery and 80 per cent for hospitalisation

were in favour of a government hospital). In the case of maternity and child health, while 60 per cent opted for government hospitals, 25 per cent of the respondents preferred home treatment. Since this was a resettlement colony, there are some traditional practitioners and dais who have been providing this service in the community for a long time. Interestingly, all the respondents who preferred home treatment for MCH were Muslim.

Our visit to the three slum areas Trilokpuri, Kusumpur Pahadi and Hazrat Nizamuddin Basti also showed that there are no facilities provided. A few voluntary organisations like Sanjeevani, ASHA, YWCA, etc. are working in these places, taking care of the health and general well being of the children, mothers and the community. There are many private medical practitioners, who may or may not be qualified. Due to their cultural beliefs, superstitions and lack of education, most of them do not mind availing the services of these practitioners.

Morbidity Patterns



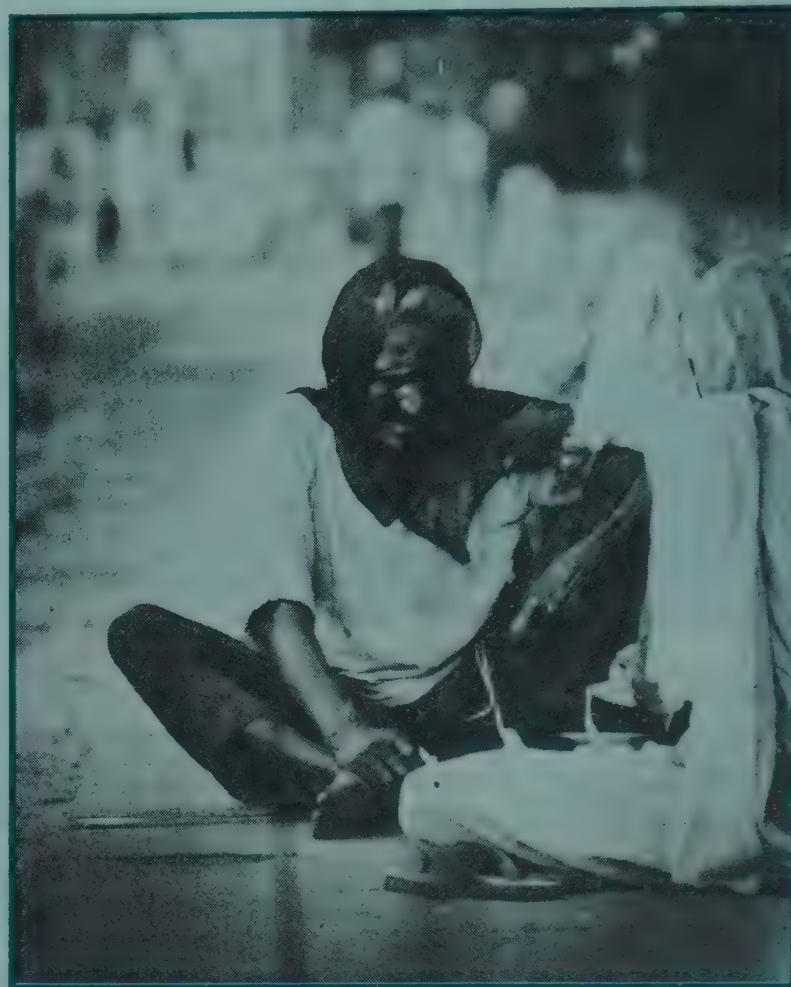
Living under the 'protection' of death

It is difficult to estimate accurately any morbidity and mortality patterns of the two populations in the "two cities" of Delhi, one being in the urban slums and the other in better areas. A few surveys conducted in the slums showed that the general morbidity amongst children was much higher than the rest of the city. The main illnesses were due to the use of contaminated water and poor sanitation. The resettlement colonies of Delhi were provided with one tap for every 22 families and one latrine for seven families. But within seven years the number of latrines and the number of taps have been substantially reduced forcing 40 to 50 families using one tap and about 100 families using one latrine, which also are now blocked in most of the places.

Break of cholera/gastroenteritis every year in the slum areas have become a regular feature now. After the 1988 outbreak, action was taken in areas like Trilokpuri and some shallow hand pumps were replaced by taps (VHAI 1988). Due to poor sanitation and lack of sewer, health problem for the population has aggravated. There are hardly any provisions for latrines. A few 'Sulabh Sauchalayas', are not enough and their timings do not suit the women and children of the area. The faecal matter is seen floating in the open drains and littered all over in the open places near the latrines, garbage dumps and residences.

Density of population in some slum areas is as high as 60,000 per square kilometre. Total number of Jhuggi-Jhonpris in Delhi are 929 (total population 1.3 million). There are 44 resettlement colonies, 480 unauthorised colonies, whose total population is still not known. An informed guess is that almost half of the total population of Delhi is living in the slum areas under very deplorable and sub-human conditions. The essential amenities that should be provided to the squatter settlements and the slum population must no longer be neglected. Their needs must be responded to urgently and whatever can be done to uplift them and to provide them with better health care facilities should be done without any further delay. It will be effective if the whole process of development could be made participatory in nature.

Finally, to deal with the problems of slum and squatter population of Delhi, a more constructive and innovative approach is needed. The poor have become an essential and irreplaceable component of Delhi and should be treated with respect and understanding.



Not even one to take care

Education

The distribution of educational facilities in Delhi suffers from serious inequalities. Educational facilities, and access to them, vary a great deal between the privileged and deprived areas of Delhi. The rich and the influential have different types and quality of educational establishments for them whereas the children of the less fortunate suffer from clear disadvantages. Those who experience educational deprivation are often condemned to a life of misery and stress. It is therefore not surprising that the deprived areas have a vast majority of the illiterate, the school dropouts and the poor achievers in higher and professional courses.



The literacy rates for both males and females are steadily improving in Delhi over the past 30 years. Four out of every five males and two out of every three females in Delhi can now read and write. This accomplishment compares favourably with other metropolitan cities in India.

A neglected field of educational provision is pre-school education although it has been an integral part of the national policy for over 20 years. The government has tried to improve pre-primary education through its ICDS and its network of Anganwadis, Balwadis and nursery schools. The performance of Delhi is extremely distressing. Only 8 per cent children in the 3-5 age group attend pre-school programmes when the comparable figures for Pondicherry are 92 per cent, for Haryana 70 per cent and for Andhra Pradesh 60 per cent. The norm recommended for anganwadis is one per 1000 population. In Delhi the provision is extremely inadequate as there is one anganwadi per 3000 population and it, thus, creates enormous pressure for admission to classes. Such conditions, in turn, keep the parents away.

Primary school education is obligatory for the State to provide. For decades universalisation of education upto this level has served as an objective. Yet the enrolment of children in Delhi is only 77 per cent with a high dropout rate for children from poor households. Although amongst those attending primary schools boys (357369) in (1989-90) are marginally more than girls (329326), the substantial number of females in educational programme at the primary level shows the growing appreciation of female education. But what is disconcerting is that 13 per cent of students do not attend schools, of which 15 per cent are girls and 11 per cent boys. The scales of enrolment continues to be tilted more in favour of boys than girls.

The achievement in getting education and professional training for the residents of Delhi in general, and of the deprived areas in particular, is disappointing as we climb the pyramid of education. The number of young people outside the educational system is also disturbing. In Delhi the demand for

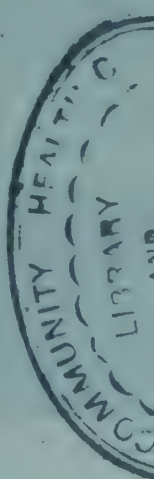
undergraduate seats has dramatically increased over the past few years and the shortfall in admissions to undergraduate level courses is estimated at 44,000.

The population of Delhi has increased from 26 lakh in 1972 to 93 lakhs in 1991 but only half a dozen colleges have been added to the existing numbers. It is apparent that the educational system, including education at the university and professional courses level, has failed to keep pace with the demand. It is ironical that this should happen in Delhi which has at least eleven universities or institutions deemed to be universities. The competition for admissions is getting very tough and seats are being snatched away from the residents of Delhi by those from outside. For every eight scholars enrolled at the university level in Delhi one is from outside. Of the total of 455 seats in engineering colleges and 430 seats in the medical colleges only a fraction are secured by the local residents.

The distance education system run by the Indira Gandhi National Open University (IGNOU) is helping to reduce the burden on the regular system all over the country. But, this system of education (except the management courses) does not hold any particular attractions for the residents of Delhi although it is situated here. Moreover, it is again just a fraction of those enrolled who are successful in attaining degrees, diplomas and certificates from IGNOU.

The private sector has been expanding its lucrative trade in the area of education as it has done in health. There is a mushrooming of academic establishments of doubtful standards and quality. The government-run institutions display glaring shortcomings like bad buildings, cramped classrooms, rampant truancy, absence of furniture and equipment, acute shortage of teachers.

There is strong correlation between ill-health and lack of education. Recent research has pointed out the ill-educated die younger in large numbers while the well-educated and the well off live longer. It is important that concentrated efforts are made to provide full coverage in education at least at the pre-

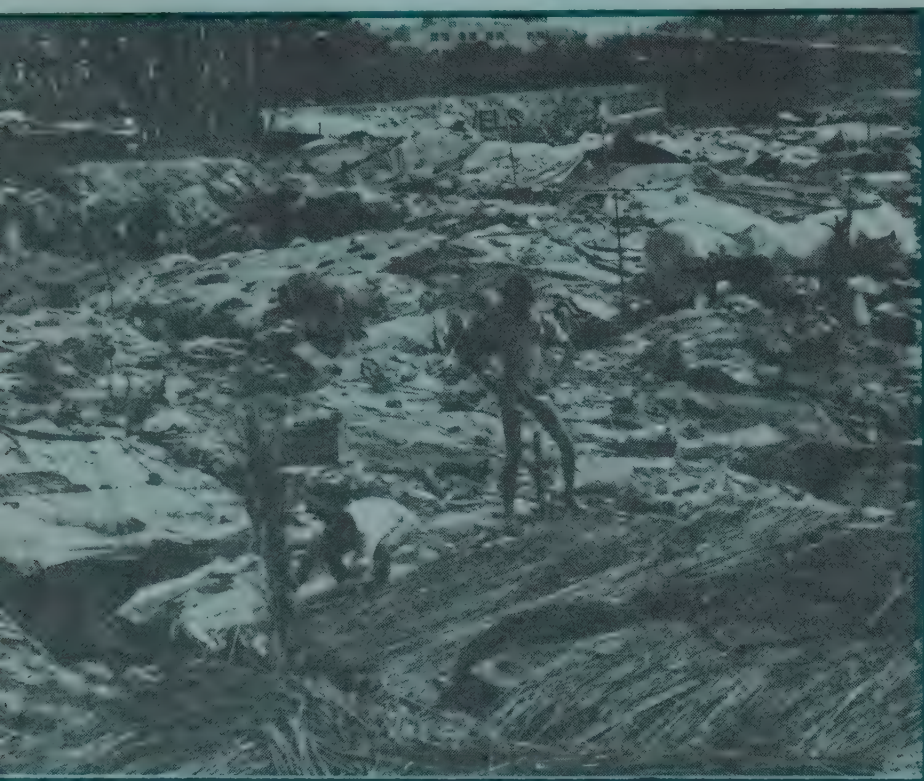


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P.D. - VIII

school, primary and secondary levels of education. Those in the deprived areas should be given highest priority to improve their performance at all educational institutions. Concentrated support must be provided for pre-school children, for females, for secondary and high school levels, for university education relating to professional as well as non-professional courses, for adult literacy and non-formal learning. Only then, education will become an effective tool for expediting social change and development and play its proven role in the prevention and treatment of diseases and epidemics in the deprived areas of Delhi and promoting positive health.

Housing Demand and Supply



Setting up for settling down

The scale and speed of urbanisation in Delhi is markedly different from other metropolitan cities of India. Delhi has witnessed one of the fastest growth rates when compared to other metropolitan cities. Since 1941 Delhi has grown 427 per cent, Bombay 227 per cent, Madras 49 per cent and Calcutta 39 per cent. The density of population in Delhi is getting steadily worse. The variations in terms of density within the city are enormous and the implications of such trends appear to be alarming, particularly for

health services.

In 1483 square kilometre of Delhi's area an estimated 93 lakh people live, of these 51 lakh are men and 42 lakh women. The age-structure of this population shows a greater proportion of those in the age group of 15-39 than the young. To house these there are over 929 jhuggi-jhonpri clusters, 44 resettlement colonies, the DDA colonies, the housing cooperatives, and private houses. The development of housing stock in satellite towns like Gurgaon, Noida and Ghaziabad has helped to some extent to reduce the pressure. Delhi's Master Plan-2001 has given an estimate of a shortfall of more than four lakh houses.

Acute housing shortage has an impact on all other aspects of city life and the authorities are not entirely unmindful of the consequences. But none of the approaches, or their combinations, seem to work. Most of those facing housing problems are concentrated in certain areas of Delhi and are persistent in their efforts to stay on in the city despite countless problems they face. Their stubbornness to not go back to the rural areas generates primarily from economic considerations. They perceive that hardships of urban life are a small, and perhaps one time, price to pay. Even if the priority to housing the urban poor given by the Delhi authorities is low, the advantages of surviving in this city, regardless of problems, are infinitely more attractive.

The strategies for housing can be either for considerations protecting the collective interests of authorities and the influential or for helping the poor, particularly those who live in deplorable conditions. There could also be a confused mixture of these two approaches. The response from the Delhi authorities to resolve the housing crisis for the homeless has ranged from the destruction of hutments to regularising the settlements to shifting them to sites elsewhere. There are, obviously, no simple answers to this extremely complex urban problem.

Removal of the poor city dwellers from their unauthorised settlements by force becomes a political and law and order issue. Whenever the authorities have succeeded in uprooting the inhabitants of

JJ colonies by using force and demolishing their dwellings the people went elsewhere and started to squat again. The local and national newspapers have frequently given the details of such atrocities on the poor with graphic details and photographs. Large scale shifting of 1,50,000 families in 1975-77 from their traditional habitats to 44 resettlement colonies was indeed a massive project by any standards but the deterioration of the living standard that followed has also become too serious to ignore.



Growing roots on a pavement

Most of the resettlement colonies, being in low-lying, trans-Yamuna area have been ravaged by recurrent floods over the years. As these areas are about 10 to 12 feet below the river-bed they always run the risk of being inundated. This also tends to raise the level of ground water, once again risking high doses of organic or chemical waste in drinking water of local residents.

No sewage can function in such a situation. It rather facilitates more flooding. This situation has given rise to the outbreak of cholera and gastroenteritis over the years in these areas (VHAI,

1988). The planning of the resettlement colonies should have looked into these aspects before settling a massive number of people. Since arriving in such colonies the people have been suffering from all kinds of diseases and health hazards.

Apart from the policy of removing the poor from the clusters of their temporarily built shelters either to unspecified areas or to organised settlements, the authorities in Delhi have also attempted to improve existing slums. The approach of upgrading represents a welcome shift in policy-making and in the attitude of administrators in trying to solve this problem. The dilapidated, awkward, and poorly built structures that the residents of squatter settlements call their "home" are not much to look at but they do mean a lot to those who live in them. The human use value of these "dirty" colonies is much more than their material value or the price of the land they occupy.

The formation of 650 or more unauthorised settlements in the city is an integral part of Delhi's urbanisation. This inevitable and irreversible process is perhaps a lot more uncontrolled in Delhi than in other metropolitan cities. Ad hoc and directionless policy decisions and their uneven and unjust implementation are amongst the major contributors to the growth of slums in cities. This report makes a plea to the policy makers that the squatters in the deprived areas should not be considered as marginal to Delhi but as members of emerging groups with considerable potential to find a place for themselves in the activities of this city. Their environment must be improved for they have arrived in Delhi to stay and are an integral part of it. The relationship between health and residential environment is basic. If the authorities in Delhi neglect this fact and fail to act now the result would be propagation of disease, contamination, social frictions all ending up in violence and a range of other problems associated with rapid urban growth.

The administrative approaches of dispersal, expulsion and demolition must be completely abandoned for they create further and far reaching problems. While efforts are being made to progressively

and systematically eliminate the real causes of migration and of the tendency of certain sections of society to concentrate in specific areas of the city, as short-term measures, the authorities should provide to the residents of squatter settlements basic amenities (such as water, the disposal of human waste, access roads, garbage collection, electricity etc.). This must be followed by medium term steps of providing community facilities such as health centres, schools, meeting halls etc. Recognition of their existence by the authorities, supplemented by the provision of basic amenities, creates a sense of security in the poor city dwellers. Settlements which fail

to create this sense of security, no matter how informally, tend to stagnate and become serious health hazards as much to their own inhabitants as to the entire city. There can be hardly any objection to the argument that the migrants should not have arrived in Delhi and created the stressful situation they have. But, more important is the suggestion that once they are in Delhi their problems should be directly addressed by the authorities. Those condemned to live in the deprived areas of Delhi, are quite capable to upgrade their environment and show steady progress in their health standards, if given timely support and respect. ♦

POINTS TO PONDER:

1. Total number of beds (1991)	20636
No. of beds per 1000 population	2.20
Population per bed	454
No. of beds in private nursing homes	2134
Total no. of beds in Hospital	18502
If the beds of nursing homes are excluded, the number of beds per 1000 population comes to	1.97
WHO recommendation on beds per 1000 population	6
Source : Medical Directory. 1991. Directorate of Health Services. Delhi Administration.	
2. Number of beds for children	1691
Percentage of beds for children as compared to total beds (18502)	8.9% as against 35.5% of children in 0-14 years age group (33.26 lakh)
Number of beds per 1000 children	0.51
Population per bed for children	1967
Source : Medical Directory. 1991.	
3. Number of beds for females	5773
Percentage of beds for females	31.2
Number of beds per 1000 women	1.36
Population per bed for females	736
Source : Medical Directory. 1991.	
4. Number of doctors in Delhi (1990) (according to MCI)	3196
Population per doctor	2833
Number of doctors (Delhi Administration hospitals & dispensaries) - 1990	1549
Population per doctor	5937
Source : Health Information of India, 1991.	

SICK HOSPITALS

*Neglected casualty ward!
Ill-equipped casualty ward!!
A hospital that cannot heal patients?
Emergency wards yet to tackle emergency!
Hospital reeling under scarcity of staff, medicines!*

These are only a few of the headlines reported in the dailies. Shockingly, these reports are based on the status of hospitals in the capital city of Delhi. Why? What ails our hospitals? An out-patient registration slip says it all: Name: Unknown, Age: 25, Sex: Female, Diagnosis: 90 per cent burns.

The woman, unconscious and hovering between life and death, is rushed to Safdarjung Hospital, where an entry on the slip reads 'No bed available. With each passing second drawing her closer to death, the victim is then jolted and bumped to distant Ram Manohar Lohia Hospital where the doctor in the emergency ward refers her to Lok Nayak Jayaprakash Narain (LNJP) Hospital. Once again the journey starts. By the time the woman reaches, LNJP, she has already reached her final destination. It is not only the shortage of beds but also of staff that has assumed serious proportions in the emergency wards of Delhi's hospitals.

The prestigious All India Institute of Medical Sciences (AIIMS) is not an exception. On average, the casualty ward at AIIMS gets fifteen to twenty different emergencies. Apart from less life-threatening conditions, many of the cases requiring admission and treatment are sent elsewhere. Even the largest hospital in east Delhi seems to have an apathetic administration, a belligerent union and demoralised doctors. According to the doctors there is a regular fraudulent practice at the hospital which involves stealing expensive medicines and selling them elsewhere. Except on a few occasions, the Ram Manohar Lohia Hospital's casualty ward has never been tested by a 'real emergency'.

Far from measuring up to its perceived role as one of the main resorts of north Delhities in emergencies, as the Sura tragedy clearly demonstrated, the emergency services at Hindu Rao Hospital are going from bad to worse. Even the private hospitals are not in any way better than government hospitals. If the casualty and emergency services are not in any way better than government hospitals. If the casualty and emergency services are any indication, none of the major hospitals measure up to the desired standard.

The reasons for this apathetic state are varied:

- * Lack of infrastructure
- * Inadequate manpower
- * Short supply of drugs
- * Ill-equipped laboratory services
- * Unhygienic conditions

And, above all, a demoralised group manning the most noble profession in the world!

PAR EXCELLENCE DELHI? : HIGHEST RANKING AMONG ALL STATES AND UNION TERRITORIES OF INDIA

- * Per capita income
- * Density of population per square kilometre
- * Decennial growth of population
- * Percentage of urban population to total population
- * Number of vehicles per population
- * Number of registered motorised two wheelers
- * Vehicular pollution

CHOLERA EPIDEMIC

The outbreak of the cholera epidemic in Delhi in 1988 took a staggering toll of 1,500 lives with hundreds of others falling ill with infections.

The epidemic had spread to 625 slum clusters spread over forty-four resettlement colonies. The outbreak of the epidemic was no coincidence—the abysmal sanitary conditions and lack of basic amenities like public lavatories, proper drainage, proper refuse disposal, shallow handpumps, all contributed to increasing and spreading the infection. Children under 1 year of age were the worst affected as they were nutritionally deficient. Over and above this, the food supplied under the ICDS supplementary nutrition programme was often unfit for consumption: bread was frequently covered with fungus, and biscuits and chanas were stale. Although over a period of one year the number of confirmed cholera cases increased five-fold, the government agencies were largely negligent.

Half-hearted, populist and politically motivated measures on the part of the government while dealing with relief activities worsened the situation. The government withdrew disbursement of compensation for cholera deaths. Little effort was made to clear the flow of sillage, which blocked drains and community la-

trines during the monsoons, rendering them unusable.

In times of stress, as in the case of epidemics, an ill-informed populace usually goes into a state of panic. The government-controlled media takes too long to arise from its slumber to inform the people. Handbills on prevention and cure lie stacked in corners. During this epidemic too, the situation was no different. Specifications were unclear on the administration of ORS, shallow handpumps were not painted red to warn people of contaminated water, antiseptic measures were sacrificed for mass vaccinations. Apathy and confusion reigned.

In addition, inadequate and disproportionate funding by the government, especially in the Trans-Yamuna and south Delhi areas, lack of coordination at all levels while dealing with relief operations, minimum effort to teach people the significance and administration of ORS, and misuse of drugs and understaffed hospitals caused more damage than was anticipated.

It is hoped that the frequency of sporadic cases of cholera and the number of deaths which took place will prompt policy-makers to think deeply and sincerely about the root causes of such tragedies and formulate ways to prevent them.

DISEASES AND PSYCHO-SOCIAL STRESSES

Ms Asghari of Bhureshah Jhuggi Camp, East Nizamuddin, New Delhi

Age : Around 40 years

Occupation : Paper bag producer

Home District : Etah, UP

Health Problems: Asghari complains of body ache, particularly in the back, legs and head, due to postural problems associated with sitting 10 to 12 hours a day making paper bags in her home. The chest pain she suffers from may also be attributed to respiratory problems. (Although

she looked like a TB patient, no clinical tests were conducted.)

Medical Services: According to Asghari there are no public health facilities in Bhureshah and people have to travel long distances for any kind of treatment. She says:

‘Doctors do not bother about us in government hospitals. We are kept sitting there all day and lose one day’s wage. And during an emergency, we merely get pushed around.’

Mr Kheru Bhatt of Kathputli Colony, Bhule Bisre Village, New Delhi

Age : 50 years

Occupation : Puppeteer

Home District : Sikar, Rajasthan

Health Problems: Kheru Bhatt's daughter was 15-years old when she died due to stomach maladies and fever. According to the doctors it was the preliminary stage of cholera. Kheru Bhatt himself has considerable respiratory stress which he attributes to the high degree of automobile exhaust in the area. It may also be related to his addiction to smoking beedis.

Medical Services: He uses the government dispensary in the same locality. In the event of colds, coughs, or other minor health problems, his family visits the dispensary, but for most maladies he prefers to go to a private doctor two furlongs from his house.

Ms Nirmala of Y-Block, Mongolpuri.

Age : 20 years

Occupation : Sweeper, rag picker

Home District : Rohtak, Haryana

Health Problems: As a sweeper and a rag picker, Nirmala suffers from skin problems as a result of handling garbage. The rusty wheel-barrow and pans cause cuts and the glass or metal fragments in the refuse pierce her skin. She says she suffers from headache, body ache, fever, extreme exhaustion and nausea and is often the victim of viral infections.

Medical Facilities: As there is no dispensary in her locality she goes to a private doctor for treatment. Her children suffer from repeated attacks of fever, malaria, diarrhoea and worm infestation.

THE 'LEFTOUTS' OF DELHI

Mentally Retarded

* Estimated number of mentally retarded	2.6 lakh
* Mentally retarded children below 14years	0.93 lakh
* Total number of schools for mentally retarded children	23
* Number of mentally retarded children in schools	2445
* Ratio of schools to mentally retarded school children	1:106
* Percentage of mentally retarded children attending school	3.9 per cent
* Mentally retarded children not attending school	59,318
* Percentage of mentally retarded children not attending school	96.4

Visusally Handicapped (Blind)

* Estimated (WHO) Blind in Delhi	1.5 lakh
* Visually Handicapped children below 14 years	0.52 lakh
* School and institutions for the visually handicapped children (Voluntary Sector:7 and Government:3)	10
* Percentage of school coverage per visually handicapped child	0.01 per cent

Mentally Ill

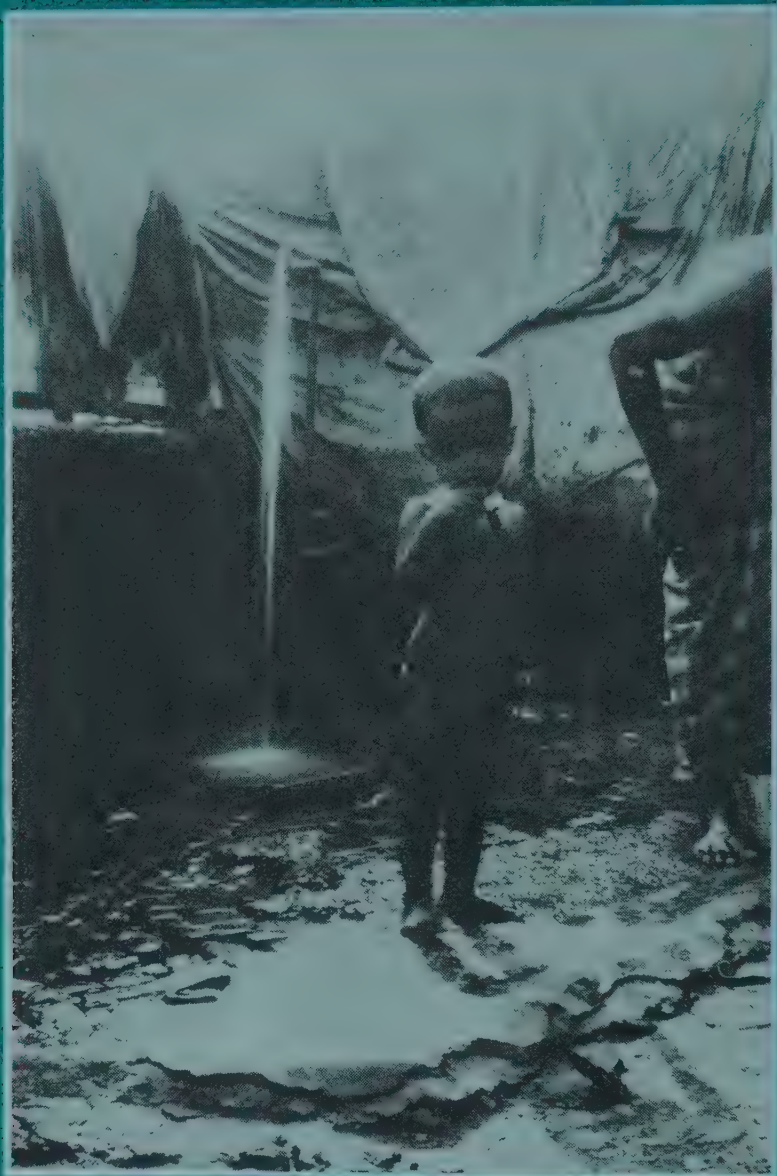
* Estimated (WHO) number of mentally ill persons	1 lakh
* Estimated numbers of persons with mild mental illness	6-10 lakh
* Institutions for the care of mentally ill persons	Negligible

Child Workers

* Estimated (UNICEF) number of child workers	4 lakh
* Percentage of child workers to total child population of Delhi	18 per cent
* Working in 5000 registered and 25000 unregistered tea shops and dhabas	30,000
* Working in scooter and car repair shops	20,000
* Working as shop assistants	30,000
* Working as labourers (agriculture, construction, porters etc.)	40,000
* Working as domestic servants (full time/part time)	1,00,000
* Street Children	1,00,000
* Average working hours of child workers (minimum 2 and maximum 16 hours a day)	9 hours
* Average maximum earning of the child workers per month (minimum Rs 2 and maximum Rs 30 a day)	Rs 421



Laughing through adversities



PUBLIC UTILITIES AND AMENITIES

There are obvious inequalities in the distribution of various amenities, facilities, services and resources in different parts of Delhi. The question is no longer whether people living in areas with acute shortages of essential amenities are deprived or not. Awareness has grown about the geographical bases of such inequalities and the time is ripe when scrutiny of service provision and of resource allocation must receive systematic attention and just response.

The characteristics of deprivation cannot be ignored and include poor living conditions, limited spread of education, high incidence of disease, unemployment, poverty, crime and delinquency. All these and many more, on their own or collectively, contribute to reducing the command the residents of these areas have over resources which affect the quality of their lives in many ways. Areas are assumed to be "deprived" or "privileged" on the basis of measurable variations and differences in the quantum of supply of services and their subsequent utilization. Most disadvantages have a tendency to cluster together and to multiply their harmful effects on the lives of those who live in such areas.

Water

When the figures for water supply are given by appropriate authorities they conceal much more than they reveal. The coverage of water supply in Delhi may be 73 per cent of population but the quantity of it could be quite low, creating a shortfall of upto 40 per cent. Then, there are, by now well established, inequalities in the distribution of water in the deprived and privileged areas. The aggregate figures are misleading since they do not show that certain sections of population have constant supply of running water, while others go without it for

several days even in the summer months and a great deal of time and effort are invested, largely by the women folk, in queuing up at water taps. The recommended norm of requirement of water in Delhi is 70 gallons per person per day. Except for the affluent and the influential, and those staying in the five star hotels, this norm has no meaning for a majority of city dwellers and for most of those living in the deprived areas.



A long wait . . . a long tread now

The forecast is that the situation is getting worse owing to the rising standards of living, on the one hand, and the several-fold increase in the demand resulting from growth in population of Delhi, on the other. Going by Table 1, the MCD areas where the bulk of Delhi's people live has faced shortfall of -28 from the recommended norm of requirement of water, whereas NDMC and Delhi Cantonment, areas

together have been receiving a surplus of water supply, +27 of the recommended norm.

TABLE 1
AREAWISE AVERAGE QUANTITY OF
WATER SUPPLIED DAILY DURING 1993

Area	Estimated population in 1993	Average quantity of water supplied (in million gallons per day)	**Water supplied Gallons per capita daily	*Shortfall (-)/excess (+)
M.C.D.	9686763	404.60	42	-28
N.D.M.C.	313128	31.59	101	+31
Cantt.	101009	8.14	81	+11
NDMC and Cantt	414137	39.73	97	+27
Total (Delhi)	10100900	444.33	44	-26

Source : Water supply and Sewage disposal undertaking, Delhi.

* Norm of requirement of water is 70 gallons per capita a day (GPCD)

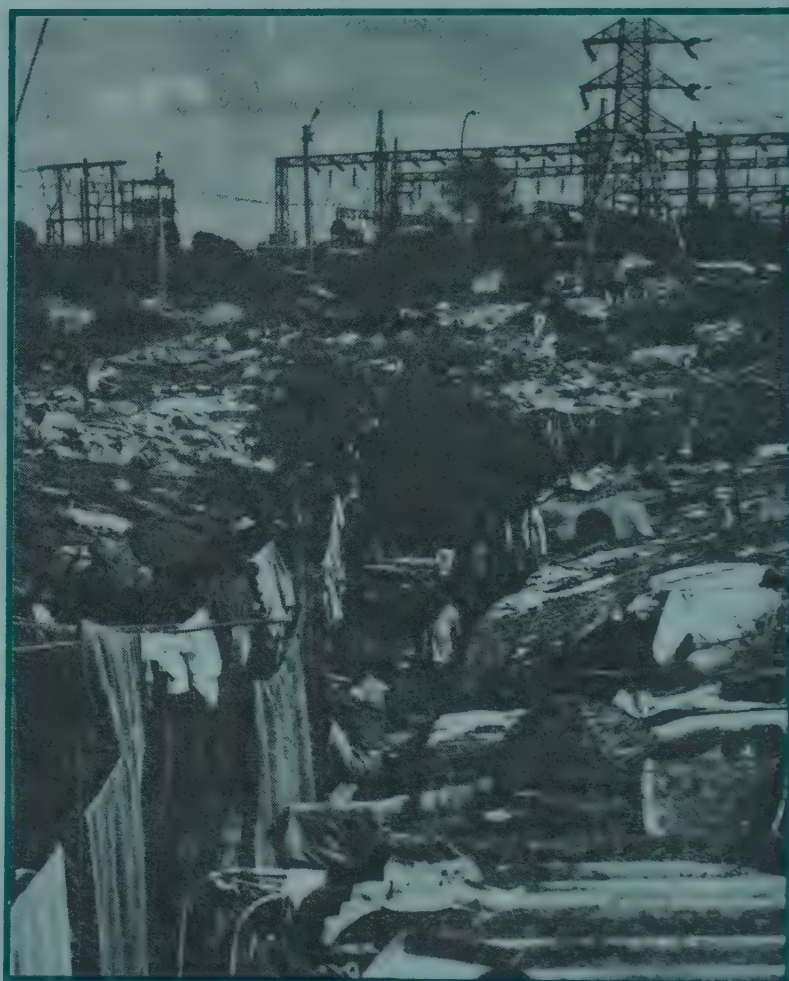
** Based on figures for January to May 1993.

The grossly inadequate supply of water, particularly to large concentrations of human beings in densely crowded areas of Delhi, cause serious problems of sanitation and health. There are hospitals and clinics in Delhi without regular supply of water. Death and disease caused by contaminated water supply frequently hit the headlines. Only three household in every five in Delhi have access to piped water. There are significant variations between the deprived and privileged areas in this respect. Those living in the slum clusters depend on community sources of water supply fetching it from long distances. Of those household having water taps at least 60 per cent complain of inadequacy of water supply. One household in every three have no access to potable water. The water crisis in Delhi has become well established. The gap between the demand and supply increases in the summer months. With the constant rise in population this gap would get progressively aggravated and cause severe health problems for the inhabitants of this city.

Electricity

The DESU is responsible to provide this service to the residents of Delhi. The demand for electricity has been increasing due to rising standards of living and the substantial growth in the numbers of consumers.

Since the modern style of life so much depends on the use of electricity, DESU is always in the news for its many shortcomings. As far as the usage of electricity is concerned those living in the deprived areas, according to DESU, are much better off than their counterparts. There are large scale transmission losses (24 per cent). The main sources of power thefts are jhuggi-jhonpri clusters, residents of unauthorised colonies, illegal factories and workshops, unapproved service stations and construction sites.



Darkness under light

The hardships that approximately 20 lakh customers suffer include frequent power cuts, defective electricity bills and a total absence of consumer service. The unscheduled and frequent



power failure disrupts rail traffic, upsets running of hospitals, nursing homes, scientific research and industries, and also interferes with the routine activities of city dwellers. With the range of management and technical problems that DESU faces it seems that as far as this service is concerned, the future for the Delhiites is rather dark. The power needs of Delhi are rising by 16 per cent a year and thus the estimated power need by the turn of this century would be 4000 Mega Watts as compared to the existing 1700 MW. Unless drastic steps are taken to substantially improve the existing situation the quality of life for those living in Delhi is doomed.

Sanitation

Any programme dealing with the health of the people and the environment in which they live must consider the measures taken to control communicable diseases. The most common sources of infection include latrines, sewage, garbage, rodent and insects, toxic wastes etc. The record of Delhi in this respect is rather poor and is getting progressively worse with such a major influx of population. Sanitary conditions in Delhi become particularly bad during the monsoon period and certain parts of the city experience epidemics and other contagious diseases with frightening regularity. The poor always pay a high price for such health hazards. In addition to living in poor physical environment with no proper sanitary controls, they are also exposed to unsafe drinking water, infected food supplies and non-availability of health services both as preventive and curative measures.

One out of every four residents of Delhi has no access to sanitary latrines. And amongst those who do have this amenity a majority do not have constant running water essential to keep latrines clean. The situation everywhere is getting serious except, of course, in the selected privileged areas of the city.

According to informed estimates over 33 lakhs residents of Delhi either use badly maintained community latrines or use open spaces adding to the already serious sanitary conditions. There are immense problems for women and children. Such

unhygienic practices are contributory factors to the spread of diseases and epidemics.



46 years after Independence . . .

In order to prevent disease and to promote positive health the concerned authorities must take urgent steps to increase sanitary facilities in Delhi. The mere numbers of the residents of this city is in itself baffling but the consequences of such practices in terms of the demand on health and medical services are serious.

Garbage Disposal

Delhi, like any other large city, faces considerable problems in the collection and disposal of its garbage. The volume of refuse being collected from private households, street and lane cleaning, construction sites, rubbish enclosures in localities, industries has been rapidly rising. The task of keeping the city clean has become difficult owing to the enormous rise in Delhi's population and the absence of matching number of staff and vehicles to cope with this situation. The condition of the city is rapidly acquiring alarming dimensions. The garbage that is generated each day in Delhi consists of putrescible vegetables, rotten fruits, kitchen waste, paper, plastic, earthenware, broken glass pieces, stone etc. The

collection and disposal of garbage from residential and commercial areas is the responsibility of the MCD. The handling of the industrial and toxic waste is outside the scope of MCD services and no one agency is entrusted with the task of disposing such wastes thus creating serious risk of contamination.



Garb of living on the garbage

The collection and disposal of garbage has become more complex, expensive and cumbersome in Delhi owing to the construction of new colonies, arrival of migrants in large numbers from rural areas and public disregard to keep their localities and the city clean.

The pattern of neglect of certain areas by this service is similar to many other municipal services. The privileged areas are swept and cleaned more frequently and thoroughly. The garbage from the residential and commercial sections of such localities is not allowed to be left uncollected. The plight of the deprived areas, where the risk of disease and epidemics is high, goes unnoticed except by a few journalists. The garbage from such areas is often not collected for long periods. Such contaminated and rat-infested rubbish dumps release foul smells in an already polluted and filthy atmosphere and invite pigs, other animals and insects. The health hazards

of such uncollected rubbish are too many and dangerous to ignore.

The service suffers from serious shortage of resources (staff, funds and equipment). It is almost impossible to stretch the existing services to cope with the ever-increasing requirements of a fast-growing city like Delhi. A properly functioning workshop to keep the fleet of trucks in regular service is as essential as streamlining the operational effectiveness of this highly visible and essential service.

The total sweeping area in Delhi is 700 sq. km. and the city is divided in ten zones. The total volume of garbage generated daily is 4000 metric tonnes. There are variations in the use of 418 working trucks (of which only 58 are mechanical) in different zones and the number of trips each truck makes every day. As can be expected the quantity of garbage is high in localities where the standard of living is low. It is also ironic that the frequency of collection of garbage in such areas is low and irregular when compared to the privileged areas.

The final disposal of the collected garbage is done by the methods of sanitary land fill and composting. There is neither any incineration nor any fuel generation from garbage system available in Delhi.

The five land fill sites and the composting unit in Okhla are in dire need of further resources and require modern techniques. The high price of neglecting this service, in health terms, would be paid by all residents of Delhi, but mostly by those who happen to live in the deprived areas. If diseases and epidemics in Delhi have to be controlled then greater care of this service should be taken especially in the rainy season in the slums, resettlement colonies and the clusters of jhuggi-jhonpris.

Sewage Disposal

The drainage system in Delhi is hopelessly inadequate and is a major contributor to spreading disease and pollution. In most parts of the city, the system simply does not exist. During the rainy season these civic



shortcomings become far too obvious. The worst hit areas are the localities with bad housing, high density of population and an extremely defective drainage system. Life in most of the low-lying areas of Delhi, as well as in a few trouble spots in the privileged areas, gets paralysed due to water-logging after every downpour.



Reclaiming sewage - the slum way

Criticism of authorities responsible for creating chaos and health hazards is familiar but so is their inaction. The efforts to look into the drainage deficiencies of Delhi are often superficial, seasonal and inconsistent. Since most of the jhuggi clusters have come up in unauthorised areas their plight perhaps can be explained. The situation in other colonies is, however, quite serious. The frequent water-logging, accumulation of filth in the narrow lanes and streets of the congested parts of Delhi and ineffective discharge of sewerage from the deprived areas add to the already large burden of hardships and health problems of the people living there. Most of the drains that do exist are frequently blocked with garbage and sullage. To prevent ill-health and hardships the task of making the drainage and sewerage system efficient is both colossal and urgent.

Apart from the serious inadequacies of the existing

drainage system in Delhi, the arrangements for treating sewage are also in short supply. Of an estimated sewage generation of 1700 MLD the existing installed capacity for treatment is only 1270 MLD, thus creating a shortfall of 430 MLD. Allowing the untreated sewage to further pollute the Yamuna river.

Inefficient and defective drainage system hits the deprived areas badly and the residents get exposed to the danger of diseases and epidemics. The slush, waste and accumulated filth breed mosquitoes and insects and contaminate the sources of drinking water creating further health problems such as cholera, gastroenteritis and other infections.

Transport: Needs and Limitations

There is a death every fifty seconds and an injury every two seconds around the world due to road accidents. India enjoys an unenviable position. It ranks first in the world in the number of road traffic fatalities per year. Delhi has become the most fatality prone city in the world. It tops the list of all metropolitan cities in India. Nine persons are killed on the roads in metros everyday; five in Delhi alone, the rest in Bombay, Calcutta and Madras.



Angling through the traffic

Increase in accidents, in the number of persons injured and the cases of fatality have been continuing over the years in Delhi, while, at the same time, it has been declining in other metropolitan cities. Though Bombay had 78 accidents per day in 1987 as compared to Delhi's 17 accidents its fatality was just 1.5 per day as compared to Delhi's 3.5 per day. In 1988 the accidents in Bombay, Calcutta and Madras put together stood at 109 per day as compared to Delhi's 18 per day. Still the fatality in Delhi was 4 per day as compared to 3.6 per day in other metropolitan cities combined together (Table 2). In fact the number of deaths in a year due to road accidents in the Capital is four times the number of murders in the same year.

In 1993 (January-August) there has been a decline in the number of accidents from 5614 to 5580 and the persons injured from 57 to 52 per lakh of population in Delhi as compared to the corresponding period of last year. But the number of persons killed and fatal accidents continue to go on increasing from 1161 in January-August 1992 to 1317 in the corresponding of 1993. One of the reasons for continued increase in fatality in Delhi, despite the fact that Delhi had less accidents as compared to Bombay and Calcutta, is that Delhi does not at all have effective hospital coverage as other cities. This could be one reason but definitely not a convincing one. But the availability of beds in itself does not explain this variation for instance while Bombay's number of hospital beds per 1000 population is 2.36, better than Delhi's 2.20, Calcutta's 1.62 which is much lower than Delhi.

Some of the reasons for the increased fatality in Delhi as compared to other metropolitan cities include:-

- i) Exceptionally large number of motor-vehicles on the roads (Table 3 and 4)
- ii) Few Traffic personnel to regulate the heavy traffic flow
- iii) Heterogeneity of vehicles and of the road users
- iv) Poor road conditions
- v) Lack of road discipline
- vi) Road congestion and encroachment (Table 5)
- vii) Apathy amongst people.
- viii) Non-existent or poor driving skills
- ix) Poor maintenance of vehicles-brakes, tyres,

wipers etc

- x) Inadequate punishment of the errant drivers

Large number of motor vehicles and accidents

Delhi's population is about one percent of the population of India, but the motor vehicles in Delhi account for more than 10 percent of the total vehicles registered in the country. Population per vehicle in 1991 stood at 5 for Delhi as compared to 24 for Bombay, 45 for Calcutta and 55 for Madras. The population per vehicle in Delhi which was 19.9 in 1971 had declined to 4.9 in 1991 as shown in Table 3.

The scooters and motorcycles comprise 67 percent of the various modes of vehicles in the city. Delhi has the highest number of motorised two wheelers in the world. Delhi also has the country's highest vehicle pollution load of 1323 tonnes per day (tpd) as compared to 1064 tpd in Bombay, 344 tpd in Calcutta and 320 tpd in Madras. WHO has found Delhi as one of the worst polluted cities in the world. In fact, 30 per cent of Delhi's population is estimated to suffer from respiratory diseases. Moreover, the incidence of respiratory diseases in Delhi is 12 times the national average.

Noise pollution generated by the traffic too is increasing rapidly and nearly 50 per cent of Delhi's population is exposed to the noise more than the maximum recommended level of 65 decibels during day time which may lead to hearing impairment and even deafness in the long run.

The manifold rise in the number of vehicles is also because Delhi is the only mega city in the world which exclusively depends on buses which is a mono-modal transport system for commutation. And this transport system remains inadequate, jam packed and negligent. This is the reason why those who can afford rely on personal transport.

The DTC has never had 100 per cent utilisation of its fleet. Of the total buses in its fleet which was 4375 in the year 1991-92 only 3750 buses were on road. Compared to 1986-87 when 18074 lakh passengers commuted through the DTC buses there has been a

TABLE - 2

**NUMBER OF PERSONS KILLED AND INJURED BY MOTOR VEHICLES
ACCIDENTS IN FOUR METROPOLITAN CITIES OF INDIA - 1987 & 1988**

METROPOLITAN CITIES	1987						1988					
	NO. OF MOTOR VEHICLE ACCIDENTS	PER DAY	PERSONS KILLED	PER DAY	PERSONS INJURED	PER DAY	NO. OF MOTOR VEHICLE ACCIDENTS	PER DAY	PERSONS KILLED	PER DAY	PERSONS INJURED	PER DAY
1	2		3		4		5		6		7	
Delhi	6,283 (77.5)	17	1,271 (15.7)	3.5	6,388 (78.8)	17	6,716 (79.7)	18	1,474 (17.5)	4.0	6,830 (81.1)	19
Bombay	28,400 (262.0)	78	536 (4.9)	1.5	8,494 (78.4)	23	27,491 (241.2)	74	520 (4.6)	1.4	8,087 (71.7)	22
Calcutta	6,889 (67.3)	19	439 (4.3)	1.2	2,637 (25.8)	7	7,061 (67.9)	19	425 (4.1)	1.1	3,541 (34.0)	8
Madras	5,682 (115.2)	16	424 (8.6)	1.1	4,020 (81.5)	11	5,568 (110.5)	15	390 (7.7)	1.0	4,020 (79.8)	11
Bombay, Calcutta, and Madras combined	40,971 (157.6)	112	1,399 (5.4)	3.8	15,151 (58.3)	42	39,820 (153.2)	109	1,335 (4.9)	3.6	15,648 (57.6)	43
Note : Figures within brackets are accidents/persons killed/persons injured per lakh of population. Source : Motor Transport Statistics of India, 1987-88 and 1988-89 Transport Research Division, Ministry of Surface Transport, Government of India, New Delhi.												

constant decline in the number of passengers which in 1991-92 was 15623 lakh.

Red Lines Buses

To improve the functioning of DTC buses the government allowed the private sector to operate a fleet of buses on city roads, such as Green Line, White Line, Red Line and Blue Line. But instead of bringing relief to the people of Delhi these buses especially Red Line buses have been spreading mayhem and fatalities on Delhi roads. Red Line buses, which were

introduced in October 1992, numbering 2250, have caused 134 deaths in 131 accidents. Three Red line buses have killed twice. Of the 60,000 vehicles prosecuted by State Transport Authority in the last eight months 20,000 are Red Line buses. On an average, each Red Line driver has already been challaned seven or eight times.

But, Red Line buses continue to spew and splatter the blood of Delhiites on the city roads. Despite overall condemnation of this service, the Red Lines continue to stalk the roads of Delhi blaring horns,

terrifying other drivers and motorists, criss-crossing, over-taking, etc. Delhi has become the most unsafe city from the road safety point of view. The children in Delhi have six times greater chance of getting hit on the roads in this city than in Bombay.

Unlike the West, most accidents in Delhi involve buses and trucks. The scooters and motor cycles are the most risky mode of travel and probability of death for the riders of these is approximately five times higher than that on cars and buses.

It surprises little when Dinesh Mohan through his study in 1985, informed about 358 fatalities amongst pedestrians, followed by 222 fatalities amongst motorised two wheelers, 116 among cyclists, 105 among bus travellers, 31 among truck users, 28 among three wheeler rickshaw (TSR) and 17 fatalities among car owner and travellers. Almost 80 per cent



Delhi roads: Kids play?

TABLE - 3
REGISTERED MOTOR VEHICLES IN DELHI - 1971 - 1991

YEAR	POPULATION IN LAKH	PERCENTAGE INCREASE TAKING 1971 = 100	NUMBER OF REGISTERED MOTOR VEHICLES							POPULATION PER VEHICLE	INDEX NUMBER (%AGE INCR. IN TAKING 1971=100)	AVERAGE ANNUAL INCREASE IN VEHICLES
			CARS AND JEEPS	TAXIS	BUSES	GOODS VEHICLE	AUTO RICKSHAW	MOTOR CYCLES & SCOOTERS	TOTAL			
1971	40.66	100.0	61,521	4,105	3,266	15,262	10,812	109,112	204,078	19.9	100.0	--
1986	77.95	190.4	202,905	8,772	14,617	61,860	40,713	746,619	1,075,486	7.2	527.0	35.1
1987	81.10	199.5	241,851	8,919	15,363	71,168	45,546	867,908	1,250,755	6.5	612.9	16.3
1988	84.10	207.2	279,708	9,094	16,319	80,412	51,700	978,698	1,415,931	6.0	693.8	13.2
1989	87.40	215.0	332,761	9,422	17,481	89,568	57,761	1,082,802	1,589,795	5.5	779.0	12.3
1990	90.55	222.7	383,610	10,026	18,651	99,078	62,007	1,191,186	1,764,558	5.0	864.6	11.0
1991	93.70	230.4	427,743	10,426	19,671	106,052	65,809	1,294,066	1,923,787	4.9	942.7	9.6
Percentage of various modes of vehicles			22.2	0.5	1.0	5.5	3.5	67.3	100.0			

Source : Bureau of Economics & Statistics, Delhi (1992).

TABLE - 4

REGISTERED MOTOR VEHICLES IN FOUR METROPOLITAN CITIES (1988-89)

METRO-POLITAN CITIES	CARS	JEEPS	TAXIS	BUSES	TRUCKS	TWO WHEELER	THREE WHEELER	OTHERS	TOTAL	POPULATION PER VEHICLE
Delhi	292,853	(Included in cars)	9,210	16,622	83,247	1,008,924	54,736	—	1,465,592	6.0
Bombay	235,707	13,250	34,338	7,127	32,528	221,531	39,351	4,326	588,158	19.9
Calcutta	169,537	(Included in cars)	16,883	12,190	32,140	167,813	16,149	9,660	424,372	12.1
Madras	107,020	320	6,964	2,192	17,296	338,486	6,451	6,300	465,029	11.1
Bombay, Calcutta, Madras combined.	522,264	13,570	58,185	21,509	81,964	727,830	61,951	20,286	1,447,559	15.2

Source : Motor Transport Statistics of India, 1986, 1987 and 1988 Transport Research Division, Ministry of Surface Transport, Government of India, New Delhi.

of the victims are pedestrians and two wheeler riders.

It is important to note that most of the accidents take place at day time rather than night. There are more accidents on straight roads than intersections.

Traffic police

In the last two decades (1971-91), while the increase in population has been 130 percent and in vehicular population more than 843 per cent, traffic police strength witnessed only 2.9 per cent growth. As compared to Delhi's traffic police strength of 1869, Bombay has 2154, Calcutta has 2184 and Madras 2108 traffic police.

The Lieutenant Governor of Delhi, P.K.Dave admits that "the traffic police is understaffed". The gap between the demand for more traffic police for regulating and managing the traffic and the availability of them is too wide and must be narrowed

to prevent the loss of life and limbs on the roads of Delhi.

Heterogeneity of motor vehicles and road users

Delhi is perhaps the world's only city where 45 types of vehicles ply. As the Deputy Commissioner of Police (Traffic) Delhi, Mr. Maxwell Pereira, puts it, "it is unfortunate that a city vying for a place among the world's elite and glittering capitals is still holding on to antiquated modes within its confines in the form of its bullock and buffalo-carts, jalliwallahs and rehra-rehri, tongas, cycle rickshaws and hand carts. While cattle abound on its streets, it is not uncommon to see elephants and even camels on Delhi roads alongside trucks, buses, tempos and Toyotas. It is a city where modernity jostles with antiquity that is fighting a strong rearguard action against attempts at its removal from the scene" (Chandra, 1992:30).

Jag Pravesh Chandra notes, "the mixing of easy going slow and fast moving traffic daily results in a

TABLE 5
PROJECTED INCREASE IN NUMBER OF
MOTOR VEHICLES AND ENCROACH-
MENT OF ROADS IN 1991 - 2001

Year	No. of motor vehicles (in lakhs)	Road length (kms)	Encroach- ment of roads (kms)	Road length actually available for traffic (kms)	Road length actually available per 1000 vehicles (kms)	No. of vehicles per Kms of Road length
1	2	3	4	5	6	7
1991	19.24	22487	5500	16985	8.8	113
1992	21.24	22487	5500	16985	8.0	125
1993	23.24	22487	5500	16985	7.3	137
1994	25.24	22487	5500	16985	6.7	149
1995	27.24	22487	5500	16985	6.2	160
1996	29.24	22487	5500	16985	5.8	172
1997	31.24	22487	5500	16985	5.4	184
1998	33.24	22487	5500	16985	5.1	196
1999	35.24	22487	5500	16985	4.8	208
2000	37.24	22487	5500	16985	4.6	219
2001	39.24	22487	5500	16985	4.3	231

Note : Column 2 - The average increase per year in vehicle registration was about 1.70 lakhs during 1986-91. Keeping in view the fast increase in vehicles registration, the annual increase has been assumed as two lakh during 1990-2001.

Column 3 - The source is Delhi Statistical Handbook 1992 and statistics, Delhi Administration

Column 4 - Central Road Research Institute - A study carried out by the Institute.

gigantic mess on the roads especially where roads are confined to two lanes. The alarming chaotic traffic conditions arise because all the modes of transport are seen competing for the right of way on the heavily cluttered and congested roads. One needs the reflexes of a Grand Prix driver to cope with the vagaries of the haphazard traffic and zigzag driving."

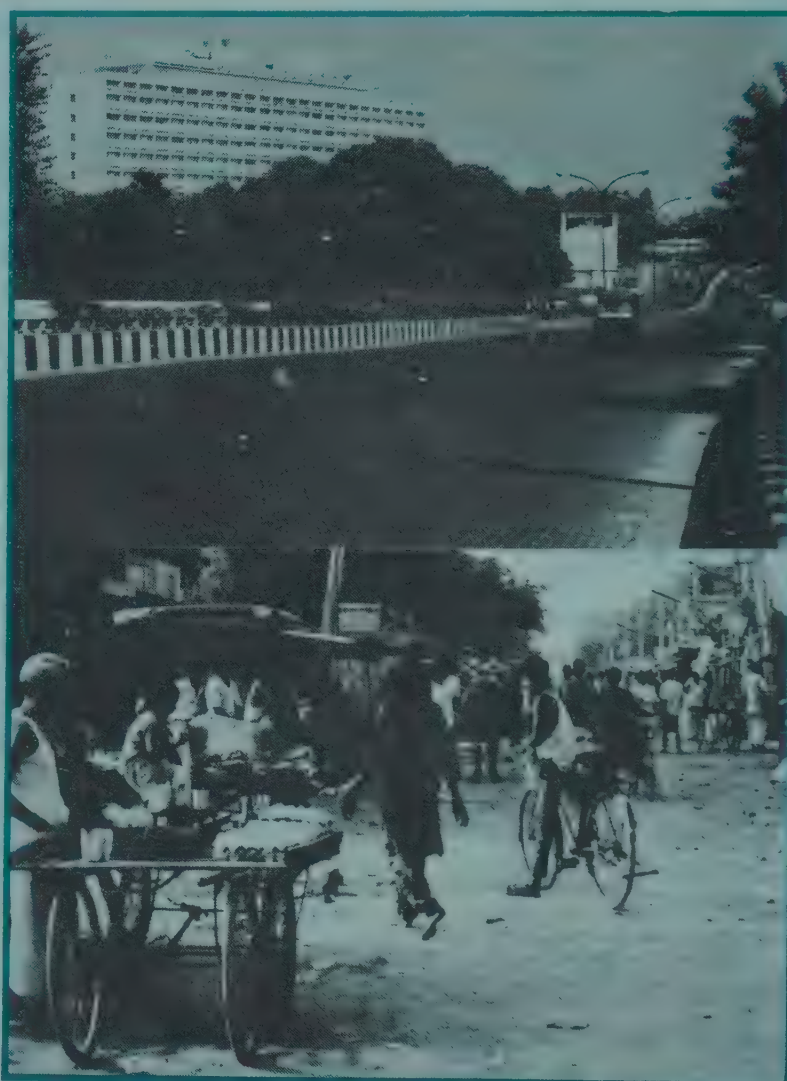
Such an amorphous and heterogeneous road users

pose a real problem for the smooth flow of traffic. They are the real traffic hazards which one has to dodge in the least possible time to reach one's destination safely.

According to the official estimates there are about 3000 horse-drawn carts, over 15 lakh bicycle. At least 25,000 new cycles are put on the road every year. There are also over 1,00,000 cycle rickshaws, out of which 80,000 are on the roads without any valid licence.

The stray cattle have mastered a knack of evading the traffic police and parking themselves on roads and traffic islands. They have become a constant menace on the roads of the capital, leading to accidents, and even deaths.

Discrimination between roads



Roads of the two cities



With the advent of monsoon the roads in the capital become a nightmare for motorists as well as for the pedestrians. Just few showers make Delhi's metalled roads unusable with flowing water and mud. And by the time water dries up one finds small ponds and deep potholes on the roads, both unsafe for driving.

Certain selected roads used by a few are repaired without any delay but at the cost of other roads in Delhi which carry lakhs of commuters everyday. "It is a fact that top officials get looked after well. Even the approach roads to their houses are in perfect shape," a senior MCD official had stated. Apart from the conditions of the surface of roads, there are problems of absence of road signs poor lighting and congestion. All these are responsible to a great extent for the fatalities.

The discrimination between the two kinds of roads takes place because the fund allocation in the budgets of MCD, NDMC and the Delhi Cantonment Board for road construction and maintenance has not increased corresponding to the increase in population and number of vehicles.

The high incidence of fatalities has a lot to do with the poor road conditions of Delhi.

Lack of road discipline

There is utter disregard and disrespect for road users other than oneself. The right of passage for other vehicles is followed in breach. All the driving and traffic rules are obeyed more in precept than in practice.

The power and pressure horns are not for regular use but most of the buses (especially Red Line) and trucks keep honking till one gives them the way. It seems as though Delhi belongs to no one. Everybody wants to use its services to the maximum but not provide one's own services for the betterment of Delhi.

The competence of most drivers is poor. A majority never learn to drive properly. They are criminally careless about other road users. Their knowledge of

highway code is virtually nil. Irresponsibility combined with incompetence turns these drivers into killers.

Road congestion and encroachment

Increasing population and increase in the number of vehicles has led to the congestion of Delhi roads. In addition to this there is rampant encroachment of roads in Delhi.

The types of encroachment which have impeded vehicle movements are :-

- * Extension of properties on to roads and footpaths
- * Parking that results in blocking the streets
- * Encroachment of footpaths by hawkers, small time hoteliers and restaurateurs, automobile workshops, building material suppliers, migrant labourers, homeless families
- * Garbage dumps, electricity poles and even police posts (civic authorities) on footpaths
- * Hoardings with low heights
- * Wedding processions, wedding receptions and rallies
- * Stray cattle
- * Holy structures
- * Bus stops

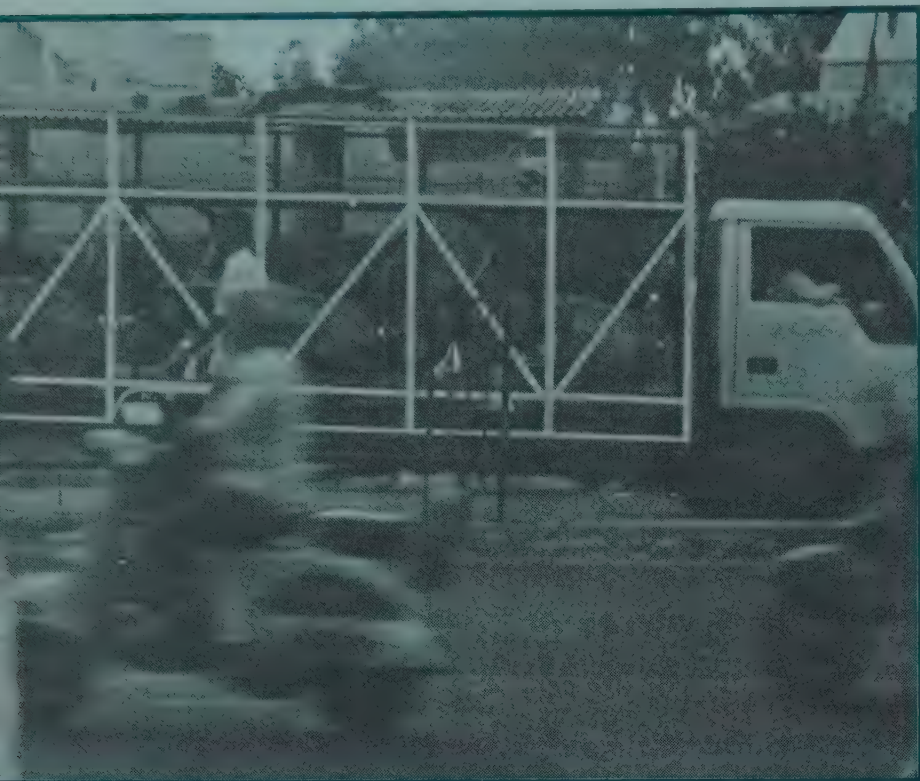
The study of the Central Road Research Institute of India shows that as a result of the impediments created by these encroachments, fuel loss equalled India's oil import bill in 1991-92. Whereas the oil import bill was about Rs.13,000 crores, the fuel loss due to encroachment was to the tune of Rs.13,750 crores. This amount would increase several fold if compensation to the victims of road accidents was paid in cash.

Year 2001

The present mess that has been created in Delhi so far as transport is concerned will get all the more aggravated by the year 2001.

The total road length of Delhi which is 22,487 kms comprises of: 59 percent four lanes, 30 percent six lanes and 11 percent two lanes. 50 percent of four

lanes and 30 percent of six lanes need widening, that is, 386 kms of roads need widening. But it is not so easy to widen roads because considerable amount of construction and encroachments have taken place on both sides of the roads. Besides Delhi's roads are both lengthwise and widthwise saturated.



Racing towards the future

Keeping this in mind we can assume the availability only of 16905 kms road length due to the encroachment on 5500 km of road length. With the increase in motor-vehicles, available road length per 1000 vehicles will drastically reduce from 8.8 kms in 1991 when the vehicle population was 20 lakh to 4.3 kms by 2001 when the vehicle population would be around 40 lakh. To put it differently, if in 1991 there were 113 vehicles per km of road there would be by the year 2001, 231 vehicles per km.

A third of Delhi's road by 2001 will be permanently cluttered. There will be massive congestions. Furthermore, there will be 80,000 goods vehicles moving in and out of Delhi carrying daily cargo of more than a lakh tonnes. Delhi is the confluence of no less than five national highways. By the year 2001, one vehicle will be added to the Delhi roads every one minute. Besides, if the present rate of addition of vehicles goes on unchecked, half of the entire area of

Delhi will be required for parking them.

Jag Pravesh Chandra warns us that if the present surface transport system is allowed to function, the chaos and confusion on the roads will paralyse the city. The doom is certain because dependence on the traditional surface transport alone, with all the attendant hazards, will make Delhi unlivable. Delhi would then become so unlivable that the grandchildren of the present generation might decide to shift the Capital to some far off place in the country.

Suggestions

Urgent interventions are required before the situation goes out of control. Interventions that would improve the traffic situation in Delhi include:

- * Speedy implementation of the National Capital Region
- * Speedy implementation of grade separated railborne Mass Rapid transport system
- * Dispersal of offices and establishments from Delhi to NCR towns
- * Phasing out of slow moving vehicles by the end of the Century
- * Creating space for pedestrians
- * Synchronisation of traffic signals
- * Selective restrictions on movement of heavy vehicles
- * Introduction of battery operated buses
- * Evolving a comprehensive parking policy, streamlining of parking system and strict enforcement
- * Vigorous enforcement to curtail hazardous traffic driving
- * Creating cycle tracks
- * Development of more bypasses to avoid unnecessary interstate traffic entering Delhi
- * Constructing goods and passenger terminals on the outskirts of Delhi
- * Conversion of ring roads into expressways by 2001 AD
- * New bridge on Yamuna to connect east Delhi to west and north Delhi
- * Emergency lanes on all free ways and bridges
- * Construction and widening of roads

- * Better designed cars
- * Speed limits and seat belts
- * Increased awareness of road courtesy and safety
- * Traffic calming measures: Construction of roundabouts, speed breakers and ripples
- * Proper maintenance of vehicles, brakes, tyres, wipers etc.
- * Removing traffic distracting hoardings
- * Standard traffic signs, signals and road markings
- * Maintenance of road surface

Above all, people's involvement in all these measures is of utmost importance.

Pollution

The effects of increasing pollution on the health of residents of Delhi are enormous and damaging. Rapid growth of population, industrialisation, congested living conditions, defective drainage, untreated sewage, uncollected garbage, large volume of motorised traffic are some of the factors responsible for recurrent lung infections; nasal, throat and eye irritation; chronic bronchitis; breathlessness, choking chest and anginal pain; skin cancer, and other life threatening health hazards. This entire range of health problems are the products of an unplanned urban life.

Delhi is leading the other major cities of India in this unenviable race of creating environmental disaster. Some experts place Delhi amongst the most polluted cities in the world. Delhi ranks the fourth most polluted city in the world and top most in India so far as vehicular pollution is concerned. Most of the air pollution hence is due to the motor vehicles which emit fumes containing harmful hydrocarbons and monoxides causing diseases of the heart, respiratory and nervous systems as well as lung cancer. Carbon monoxide gas constitutes about 55 per cent of the total vehicular population. Nearly 250 tons of gas is emitted by vehicles everyday which reacts with haemoglobin in the blood thereby reducing the respiratory capacity of the lung. Also emitted each day in Delhi are over 400 tons of hydrocarbons which cause heart and respiratory diseases, lung cancer and headaches as well as 600 kg of lead which causes

impairment of nervous and respiratory systems.

Air, water and noise pollution in the city have reached menacing levels. Basic civic services have reached a breaking point. Absence of formal and informal controls dealing with unrelenting rise in population, setting up of unauthorised colonies, almost an infinite and continuous addition of motorised vehicles on the roads discharging harmful fumes and toxins; large number of legal and illegal industries fouling the air with thick black smoke and toxic substances; power stations daily releasing vast quantities of sulphur dioxide and flyash and many other factors contribute to disease, disability and death in Delhi.



Banking on survival

The Yamuna has become an endangered river as most of the untreated water is carried into it. There are 15,000 small, medium and large industrial units registered in Delhi (there are perhaps as many unregistered units, many of which have dangerous levels of emissions). Delhi's industrial waste, containing very harmful chemical substances, is dumped into the river. In addition to these, Delhi has stone crushing quarries on its outskirts continuously spewing harmful dust into the air.

These facts only give an idea about the quantity of suspended particles in the atmosphere. Unless these are related to health and well-being, it will be well nigh impossible to derive a holistic development strategy.

In a recently concluded survey of three government hospitals in the Trans-Yamuna area, random interviews from the OPDs indicated that 30 per cent of the patients, half of them small children, suffered from respiratory ailments. After circumspect questioning, it was believed that air pollution is a key problem in slum areas and results from their close proximity to factories, the effect of passive smoking, ill-ventilated homes made worse by indoor cooking with the use of dung or wood fuel, excessive amounts of dust at workplaces to which children are often exposed, and to polluting industrial units in the vicinity (VHAI, 1992:123).

A major source of air pollution is the cooking of food in houses with inadequate ventilation. Recent evidence points to this form of air pollution within homes as the cause of millions of deaths in the country every year. The burning of cooking fuel indoors causes heavy smoke in the atmosphere, exposing the women to these toxic fumes. As over 90 per cent of the households use wood and dung as fuel, the scale of the problem is immense.

The ill-effects of wood smoke are clearly evident from the heart disease, Cor Pulmonale, in which the right lower chamber of the heart enlarges and fails because of a disorder in the lungs. A survey undertaken over a period of fifteen years on hospital patients in Delhi found a surprising similarity in the incidence of Cor Pulmonale in both men and women, even though 75 per cent of the men were smokers as compared to only 10 per cent of the women.

Any condition which results in reducing the blood's capability to carry oxygen to the tissues, like anaemia, will also make a person more susceptible to carbon monoxide toxicity. This is particularly hazardous for women, who have lower haemoglobin reserves than men, which not only makes them more prone to anaemia but also more vulnerable to lower doses of carbon monoxide. During pregnancy, too, there is additional demand on the haemoglobin level. This exposure could also affect the urban child, leading to reduced birth weight and increased prenatal death rates.

The cumulative effect of all these is putting a heavy pressure on the quality of life of Delhi and its residents. It seems likely that the situation would get worse in the future because of a combination of factors such as scarcity of resources, apathy, inadequate infrastructure, mismanagement, lack of planning, unwillingness of appropriate authorities to formulate appropriate policies and take systematic action. The worst victims of this complex situation are of course those who live in the deprived areas. The awareness about the harmful effects of pollution amongst large number of residents of the deprived areas is poor. The quality of life in Delhi is deteriorating beyond the level of acceptance and tolerance.

Pollution, as a generic term and consisting of several diverse sources, describe the growth of a recent urban phenomenon which, if not checked, produces health hazards for all the living beings and the environment. Like the city, pollution is a man-made danger and can be overcome by people through appropriate policies, adequate allocation of resources, implementation of comprehensive and coordinated programmes for improvement aimed at human and environmental health, in short ecosystems health (Carr-Harris, 1992). ♦

EXISTING SHORTFALLS UNDER VARIOUS SERVICES IN DELHI - 1993

I Water

Existing capacity of Water Supply (in million gallons a day)	444.3 MGD
Present requirement at the norms of 70 gallons per capita a day	700 MGD
Present shortage of water supply	255.6 MGD

II Sewage

Present generation (in million litre a day)	1700 MLD
Installed capacity of Sewage Treatment	1270 MLD
Untreated Sewage	430 MLD

III Electricity

Present power demand (in megawatt)	1700 MW	
Generation of power by DESU	375 MW	} Total 850 MW
Thermal Power Station	475 MW	
Shortfall	850 MW	
Losses suffered by DESU approx.	Rs 2000 crores	
Total number of consumers	18 lakh	

IV Housing stock (1989)

Number of households in Delhi	11.6 lakh
Estimated current housing stock (including those in the slum, squatter, unauthorised colonied)	16 lakh
Shortage of Dwelling Units (DUs)	4.40 lakh
Shortage of DUs by 1995	8.25 lakh

V Doctor nurse ratio

Number of doctors in hospitals	2839
Number of Nurses	5744
Nurses per doctor (as against the norm of 3 nurses per doctor)	2.02

VI Ambulance Service

* Total (Hospital:76, Fire Service:41, CATS : 27)	244
* Population served per ambulance	38403

VII Villages without sewage

Total urban villages	108
Villages connected with functional sewage	83
Village without sewage	25

VIII Milk supply

* Milk requirement	25 lakh litres per day (llpd)
* Milk supplied by Mother Dairy (set up in 1974, autonomous)	6.5 llpd
* Milk supplied by Delhi Milk Scheme (set up in 1959, state owned) (Accumulated losses of over Rs 200 crore till 1991)	4.5 llpd
* Organised private sector and other state cooperatives	4 llpd
* Shortfall	10 llpd

UNCLAIMED DEAD BODIES

About seven unclaimed dead bodies are recovered from different parts of the city everyday. Two agencies in Delhi, Waqf Board and Electric Crematorium, are formally authorised to receive and perform the last rites of these dead bodies after religious identification.

According to the police sources these unclaimed dead bodies are kept for 72 hours to facilitate the identification by their relatives. Before disposing them off the police department keeps all the particulars and one photograph of the deceased in its record.

It is difficult to say that how many unclaimed dead bodies are taken by the medical colleges for educational purpose. Except for violence and traffic accidents the aforesaid agencies do not have provision to enquire and list the exact cause of death. But in fact a majority of them are found dead on pavements, on roads and some of them are found murdered in nallahs, bushes, etc.

ASHOK VIHAR JHUGGI DWELLERS' SHOWDOWN FOR THE 'RIGHT' TO DEFECATE

New Delhi. A few thousand men, women and children of the jhuggi clusters in Ashok Vihar converged in front of the north-west district DCP's office and protested against the ban on their 'right' to defecate in the open. A resolution passed at the end of the demonstration said that if the ban was not lifted, the Lt. Governor would awake on 1 March to see them at his own door.

That apart, the day was an anti-climax. A real-life drama that promised to be a tragi-comedy, in fact turned out to be a farce. The jhuggi dwellers had been crying themselves hoarse, the previous week, threatening to protest the ban in a most unusual way-by defecating before the Ashok Vihar police station (which, incidentally, houses the DCP's offices too).

However, when it came to the crunch, the jhuggi dwellers and their leaders just could not gather the courage to throw caution to the winds. They did come to the protest venue, they did shout slogans castigating the High Court ban on their 'right to defecate' and against the 'harassment' by the police. But they did not carry out the ultimate threat.

'Good for us', said a policeman posted on the street opposite the police station, and on which the men, women and children squatted and listened to a few Congress (I) leaders spewing out threats, including that which was not carried out. The police, in fact, were prepared for any eventuality, though many expressed their 'sympathy' for the jhuggi dwellers.

The DCP, north-west, Mr Deep Chand, on the other hand, felt that the police's image was being sullied for no fault of theirs. 'Why are they demonstrating here', he demanded, and added that the Commissioner of Police had already made their 'position' clear. An affidavit filed in the High Court put the responsibility of enforcing the Court's ban on defecating in the open, in and around a Delhi Development Authority (DDA) park in the area, on the DDA.

'They own the land where the park is situated, and the residents who went to Court over the issue live in a DDA colony. Why should we be penalised for trying to do our duty. In fact, it is the responsibility of the watch and the ward staff of the DDA to enforce the ban. They do have a security staff with them, don't they', Mr Deep Chand asked, irked at the criticism of the police by the jhuggi dwellers.

The issue had for long been agitating the people of the DDA colonies around the park, the inhabitants of Shahid Sukhdev Nagar, Shahid Udham Singh Park and Chandrashekhar Azad Nagar (the jhuggi clusters), besides the DDA, the police and the railways. Boxed in as they are by some railway tracks on one side and the Wazirpur industrial area on the other, the only place where the jhuggi dwellers could defecate was the DDA park on the other side of the tracks.

Unfortunately, although it was a necessity for the jhuggi dwellers, it was not pleasant for those living in the DDA flats adjoining the park. They complained to the DDA which constructed a 1 km long wall to keep them away. But the wall was breached a number of times over the months and years. The police were called. Some arrests were made, but in vain. The problem persisted and ultimately the residents went to court.

The High Court ruled that the jhuggi dwellers be prevented from defecating in the open. 'Where should we go', said a man affected by the ban. A question that remains to be answered.

"ONE DAY DELHI WILL COMPLETELY DIE"

-Jag Parvesh Chandra, Former Chief Executive Councillor of Delhi, on Delhi

After the present elections, Delhi will have a Legislative Council. It will have its own Council of Ministers but Delhi's status as a Union Territory will continue. I have always advocated for this kind of governance set up because it can receive and use entire funds from the Centre. Such an administrative and financial arrangements will expedite the development of Delhi at a greater pace.

If Delhi were made a State, the Centre would have no financial liability for it and would expect it to generate finance deploying its own resources. In that eventuality Delhi's sales tax would go up, excise would go up, school fees would go up. Delhi's current lower sales tax have helped it to become a flourishing trade centre. Goods are imported from Delhi by other States. It is because of the profits that the traders make that Delhi has the highest per capita income in the country.

The National Capital Region (NCR) ordinance was passed in 1985. Its aim was to decongest Delhi. The plan was to save Delhi by creating seven little Delhis, small self-sufficient contact towns equipped with all modern facilities. This was intended to absorb migration of people from other areas. But the NCR exists only on paper. The Chief Ministers of the neighbouring States want industries to be set up in their respective areas. The States are willing to give land to private builders but not to the Central government for such developments, government for such developments.

Delhi requires Mass Rapid Transport System (MRTS). In 1947 there were only 11,000 vehicles in this city but today there are 22 lakh vehicles. In order to reach quickly and safely one's destination MRTS is required. With the present capacity of roads if all the vehicles of Delhi proceeded in one direction at the same time there would be no space left on the roads it will be bumper to bumper. Delhi will step into a coma. Things will come to stand still. Kasturba Gandhi Marg has been widened five times. Delhi's roads are saturated lengthwise and widthwise. The vehicular population is galloping in Delhi. Delhi's population is 97 lakh in 1993 and would be around 140 lakh in 2001. With the manifold increase in vehicular population, can the Delhi roads take such a large number of vehicles? If this situation continues, Delhi will be like a railway platform

where women and men will be jostling to reach their destinations. *Vijay Chowk will be like Chandni Chowk.* Delhi is a land locked territory. Bombay can have Greater Bombay by reclaiming the sea. But Delhi has no such facility and hence the need to have NCR.

In 1912, the British Viceroy had told Lutyens that he wanted Old Delhi and New Delhi to be built like twins. So the New Delhi area started from Daryaganj. If New Delhi had been built 10 Kms away from Old Delhi it would have arranged for its transport, schools, hospitals, roads, power house etc. Delhi depends on old power structures.

Civic services like water, electricity etc., are not able to meet the demand of the people. Power generation from power houses is limited. While population increases 5 per cent the increase in demand for power is 15 per cent.

Between 1951-1982 Rs.1037 crores were spent on Delhi's development. During my tenure of seven years (1983-1990), as the Chief Executive Councillor of Delhi, Rs.2490 crores were spent. Development cannot keep pace with increasing population of Delhi. Every house in Delhi is attracting migratory people. Those who cannot afford whole time servants have got part-time servants or ayahs. Who is encouraging migration then?

No dispersal of industries from Delhi should take place. After all where will our IIT, ITI and polytechnic trained youths go? Industrial development must go on in Delhi.

The government that will be formed in Delhi after the elections will have to immediately look into three things :-

- * Implementation of MRTS
 - * Implementation of NCR by building new satellite towns
 - * Allowing the construction of a third storey all over Delhi
- These measures will solve the housing problem to a great extent. The situation of Delhi is such that:-
- * *Delhi's prosperity is both its pride and problem*
 - * *Delhi's beauty is both a blessing and a burden*

Pollution and traffic congestion is so great in Delhi with vehicles belching out poisonous toxins that *One day Delhi will completely die*. Without the implementation of MRTS and NCR India's capital will have to be shifted by the year 2001.

"DELHI IS IN A MESS CREATED BY THE ENTIRE SYSTEM"

- S.K.Dheri, Chief Fire Officer, Fire Services, New Delhi on Fire Services in Delhi

Delhi fire service has not kept pace with the growth of the city over the last four decades. Until 1984 Delhi had only 17 main fire stations owing to the financial constraints of the Delhi Municipal Corporation which manages the fire service. And soon after Mrs. Indira Gandhi's assassination in 30th October 1984, it was a real test for the service to attend 868 fire calls within three days. With a fleet of 120 fire engines, of which 33 were damaged by the mob, all the calls were answered. Where 20 fire engines were required we fought fire with just one fire engine.

Fire service has been one of the most neglected service all over the country. The authorities argue that since fires do not take place everyday why should money, space and resources be blocked on a service which is not required daily. They do not realise that systematic, efficient and fully operational fire brigade is a prerequisite for the growth and security of urban centres engaged in industrial and commercial activities.

It is only when a major fire breaks out that the administration realises the importance of fire services. The authorities advise us to see them the next day with proposals for upgradation of equipment or for more fire stations etc. But the file is taken away and placed with other files on low priority. The urgency is no longer there until the next tragedy.

Delhi is in a mess which has been created by the entire system: authorities, town planners, architects and officials. Just to secure votes in the elections the politicians goad the migrants to encroach upon government land. Then they pressurise DESU to instal an electricity pole in the unauthorised settlement or a J.J. Cluster. As the people need electricity they start power thefts. The wires used for such illegal connections are of a substandard quality which leads to short-circuit and the consequent fire. Of all the causes of fire in Delhi in 1991-92 58 per cent were caused by electric short circuit.

Besides, these jhuggis are constructed of highly combustible materials like dry bamboos, wood, old discarded gunny bags, tarpaulins, straw, dry grass, PVC sheets etc. Many a times fires are created just to seek compensation.

The main problems which the fire service faces in Delhi are from:

- * Jhuggi-Jhonpri clusters (squatter settlements)
- * Mushroom growth of legal and illegal industries
- * High rise buildings and the inadequacy of built up fire protection systems
- * Inadequate water supply for fire fighting
- * Narrow approach in old city areas where even the smallest

fire fighting appliance cannot enter

- * Delayed response time
- * Defective planning and delay in the implementation of existing plans
- * Inadequacy of building bye-laws
- * Fire service legislation and its implementation
- * Lack of public awareness about causes of fire

With the enactment of Delhi Fire Prevention & Fire Safety Act, 1986, the Chief Fire Officer has now the power to seal any building if the necessary fire protection arrangements have been neglected. The new building bye-laws for Delhi limits the maximum height of buildings. A building should not exceed 50 metres (3 metres make one storey). The buildings over 50 metres should have a helipad. The helipad atop the building will be fully covered on surface as well as have higher parapets so that, in the eventuality of fire, the rescue helicopter may not fan the fire.

As per the international standards, the response time (the time taken to reach the fire site from the fire station) should be three minutes in urban areas and five minutes in rural areas. According to the Standing Fire Advisory Committee of India the response time should be five minutes in urban areas and 10 minutes in rural areas. In reality, however, the response time varies according to the place and the hour of the day. During peak hours, say at 10 a.m., if a fire breaks out in Kidwai Bhawan and the fire brigade leaves Connaught Place station barely a kilometre away, it will take more than 10 minutes to reach the spot. The two million vehicles on the roads of Delhi pose a great hindrance to the swift movement required of the fire brigade. The motorist frequently do not give way to the fire brigade as they want to use this as an opportunity to drive fast themselves. There is no road discipline or traffic sense amongst a large number of motorists. The fire brigade thus is prevented from reaching the fire site in time.

We are imitating the West in terms of high rise buildings but we are not Europeans. One has to educate the people and the school children that when you see a fire:-

- * Raise an alarm
- * Try your own resources in calming and controlling the fire before the fire brigade comes
- * Do not panic as panic is an enemy
- * Do not break the window panes as it will carry more oxygen and inflame the building all the more. If you do not break the window there will be smoke but fire will be contained

The major causes of fire in 1991-92 were:-

- * Electric short circuit (58%)
- * Carelessness (18%)
- * Naked flame (3%)

- * Spark/heat (2.5%)
- * Fire works (2%)
- * Intentional (0.9%)
- * Spontaneous (0.01%)
- * Children with fire (0.01%)
- * Lighting (0.01%)

Fire due to electric short circuit occurs not only because of the poor quality of electric wires and gadgets but also because of the over-loading. In many cases a person takes permission to use one airconditioner but, in due course, the same person may start using four airconditioners on the same wiring. Most fires occur due to these reasons, that is, substandard wires coupled with over-loading.

Constructions made during Jawaharlal Nehru's period and after it are not well planned as those that were constructed before the Independence. Udyog Bhavan, Krishi Bhawan and other government buildings have caught fires, at one time or another. The air conditioning ducts were frequently responsible for such fires. Often the airconditioners do not get installed but the air conditioning ducts exist. When these buildings catch fire the ducts became oxygen facilitators thereby adding fuel to fire.

I want to see everybody safe and nobody losing life or property in fire accidents. My conscience pricks me if people die in fire.

It is with this aim that we want to enlarge our coverage. Besides, our normal fire stations, we open five temporary fire stations during harvesting season in the rural areas like Alipur, Mehrauli, Brijwasan etc. We also open temporary fire stations in Yamuna Pushta and certain areas in East Delhi during summer season to immediately tackle any eventuality of fire.

As compared to 1984 when we had only 17 fire stations today (1992-93) we have 32 fire stations. These have literally doubled in a span of just nine years. By the year 2001 there are plans to have 63 fire stations spread in all parts of Delhi. Over the years there has been an increase in the fleet, personnel, fire calls, but fire loss of property, death due to fire etc. have also gone up phenomenally. While the increase over 1988-89 in fire stations was constant at 14 per cent, appliances increased to 20 per cent, personnel 36 per cent, the persons killed due to fire increased to 19 per cent, fires by 26 per cent and the property devastated due to fire galloped to 210 per cent and was worth Rs 1604 lakh in the year 1991-92 (Table 6).

TABLE 42
FIRE SERVICES, INCIDENCE OF FIRE, DEATHS, CASUALITIES, PROPERTY LOST
AND PERSON SAVED IN DELHI -1988-1992

YEAR	NO.OF FIRE STATIONS	NO.OF APPLIANCES	AMBU-LANCE	NO.OF PERSONNEL	NO.OF CALLS ATTENDED	NO.OF FIRE CALLS TO TOTAL CALLS	PERSONS KILLED IN FIRE	PERSONS INJURED IN FIRE	PROPERTY DEVAS-TATED IN FIRE (RS.IN LAKHS)	PERSON RESCUED OUT OF RESCUED	PERSON DEAD
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1988-89	21 (100.0)	197 (100.0)	-- (100.0)	1462 (100.0)	8199 (100.0)	6453 (100.0)	88 (100.0)	519 (100.0)	516 (100.0)	1341 (100.0)	199
1989-90	24 (114.3)	216 (109.6)	29 (100.0)	1431 (97.9)	9117 (111.2)	7304 (113.2)	91 (103.4)	408 (78.6)	638 (123.6)	1209 (90.2)	218 (109.5)
1990-91	24 (114.3)	216 (109.6)	29 (100.0)	1982 (135.6)	9955 (121.4)	7815 (121.1)	97 (110.2)	632 (121.8)	1413 (273.8)	1165 (86.9)	211 (106.0)
1991-92	24 (114.3)	238 (120.8)	41 (141.4)	2001 (136.9)	10558 (128.8)	8151 (126.4)	105 (119.3)	490 (94.4)	1604 (310.9)	1014 (75.6)	212 (106.5)
Total--	--	--	--	37829	29726	381	2049	4171	4729	840	

Note : Figures in brackets are percentages taking 1988-89 = 100.

Source : Annual Administrative Reports 1988-89, 1989-90, 1990-91, 1991-92, Delhi Fire Service.



RISING CRIMINAL BEHAVIOUR

Crime and delinquency serve as inverse indicators of the healthy, fruitful, meaningful, productive social interaction prevailing in a society. Low incidence of crime indicates that the society has a very good social interaction amongst its people and vice-versa. There is an obvious link between the growth of Delhi and increase in its crime rates.

Going by the crime indicator, Delhi ranks second in India in criminality (Table 1). Compared to Bombay, Calcutta, and Madras, Delhi tops in murder, attempted murder, rape, kidnapping, abduction, theft, criminal breach of trust and cheating (Tables 2 and 3). Over the years there has been a decline in crimes in other metropolitan cities of India but the crime situation in the national capital is steadily worsening. Delhi continues to be ahead of other metropolitan cities in placing increasing number of its people on the altar of crime. The situation is so grim that Delhi, as an offence prone city, has been clubbed together with high risk states and Union Territories in India.

Negligible Convictions

The sad and shocking aspect about this appalling scenario is that though the number of reported cases of murders kidnapping, rape, dacoity and robbery is high, the number of convictions is virtually negligible (Table 4). While the reported cases have increased between 1989 to 1991, the cases brought to the court as well as those resulting in convictions have declined. In no category the conviction is more than two per cent. These factors encourage criminal behaviour and make the law-abiding citizens diffident. In Delhi, in 1988 and 1989, out of a total of 280 rape cases, only four men were convicted. 97 cases are still pending investigation and 300 are awaiting trial. Trial results

for 1992 indicate that of the 276 reported cases of rape, only 46 persons were convicted, while 190 were acquitted. In the case of rape, those which get reported are just the proverbial tip of the iceberg. For every one case that is brought to the notice of law enforcement agencies there are a number which go unreported out of fear or because of societal pressure.

Unlike a civil wrong a crime violates law. The knowledge about known crimes comes from official statistics. There is no doubt that the total volume of known crime, and perhaps unreported crime in Delhi is increasing at a threatening pace, particularly when compared to the rate of crime in the other three metropolitan cities in India namely Bombay, Calcutta and Madras. The situation is as alarming when current rates of major crimes in Delhi are compared with the rates of earlier years.

Crime Against Property vis-a-vis Crime Against Person

The crime against property in Delhi accounts for 44.5 per cent while crimes against person has a share of 5.6 per cent of the total crime in Delhi.

When compared to the average rate of other three cities the rate of crime against property (theft, breach of trust and cheating) in Delhi is eight times higher whereas the crime against person (murder, attempt to murder, rapes and kidnapping) is three times higher. The comparisons of different rates of crimes in Delhi and other three cities present a very grim picture for example murder is 1.9 times higher, attempted murder 2.5 times higher, rape 3.7 times higher and kidnapping 4.9 times higher. Similarly, higher rates in Delhi are also reported for crimes like theft, breach of trust and cheating. As compared to

TABLE 1
INCIDENCE & VOLUME OF TOTAL COGNIZABLE CRIMES (IPC)
IN STATES AND UTs DURING 1991

SL. NO.	STATE/UT.	INCIDENCE OF TOTAL COG. CRIMES TOTAL	PERCENTAGE CONTRIBUTION TO ALL-INDIA (IN LAKHS)	ESTIMATED MID-YEAR POPULATION	VOLUME OF TOTAL COG. CRIMES	RANK OF* CRIMINALITY
(1)	(2)	(3)	(4)	(5)	(6)	(7)
STATES:						
1	ANDHRA PRADESH	101676	6.1	667.7	152.3	23
2	ARUNACHAL PRADESH	1861	0.1	8.7	214.6	15
3	ASSAM	35144	2.1	224.7	156.4	22
4	BIHAR	119932	7.1	869.2	138.0	25
5	GOA	3805	0.2	11.7	324.4	4
6	GUJARAT	124472	7.4	413.8	300.8	6
7	HARYANA	28584	1.7	164.4	173.9	20
8	HIMACHAL PRADESH	9209	0.5	51.4	179.3	19
9	JAMMU & KASHMIR	15545	0.9	77.8	199.7	17
10	KARNATAKA	104489	6.2	450.3	232.0	14
11	KERALA	74103	4.4	291.2	254.5	9
12	MADHYA PRADESH	218431	13.0	666.9	327.5	3
13	MAHARASHTRA	192295	11.5	793.3	242.4	12
14	MANIPUR	2100	0.1	18.4	114.1	28
15	MEGHALAYA	1726	0.1	17.8	97.1	31
16	MIZORAM	1781	0.1	6.9	257.7	7
17	NAGALAND	1641	0.1	12.3	133.0	26
18	ORISSA	52081	3.1	317.1	164.3	21
19	PUNJAB	16081	1.0	203.0	79.2	32
20	RAJASTHAN	113617	6.8	441.8	257.2	8
21	SIKKIM	469	0.0	4.1	115.8	27
22	TAMIL NADU	133284	7.9	558.8	238.5	13
23	TRIPURA	5594	0.3	27.7	201.7	16
24	UTTAR PRADESH	208561	12.4	1397.2	149.3	24
25	WEST BENGAL	69073	4.1	685.1	100.8	30
TOTAL (STATES)		1635554	97.4	8381.3	195.1	
UNION TERRORIES:						
26	A & N ISLANDS	551	0.0	2.8	196.1	18
27	CHANDIGARH	1629	0.1	6.5	252.2	10
28	D & N HAVELI	437	0.0	1.4	314.4	5
29	DAMAN & DIU	257	0.0	1.0	249.5	11
30	DELHI	34876	2.1	94.9	367.3	2
31	LAKSHADWEEP	54	0.0	0.5	103.8	29
32	PONDICHERRY	5017	8.0	8.0	629.5	1
TOTAL (UTs)		42821	2.6	115.1	372.0	
TOTAL (ALL INDIA)		1678375	100.0	8496.4	197.5	

Note: 1 * Rank on the basis of volume of total cognizable crimes (Col. 6) in the States & UTs
2 Percentage Less than 0.05 is also shown as 0.0

Source: National Crime Records Bureau, 1991

TABLE - 2
INCIDENCE OF TOTAL COGNIZABLE CRIMES (IPC) IN FOUR MAJOR CITIES
DURING 1989-91

CITIES	INCIDENCE OF CRIMES			INCIDENCE PER LAKH OF PUPULATION					
	1989	1990	1991	1989	RANKING	1990	RANKING	1991	RANKING
Delhi	28,467	29,510	32,462	362.1	1	362.5	1	382.7	1
Bombay	37,309	38,302	39,897	318.7	2	315.5	2	317.3	2
Calcutta	13,738	12,975	13,803	129.9	4	120.8	4	126.4	4
Madras	14,168	12,372	12,633	275.3	3	235.5	3	235.6	3
Bombay, Calcutta, Madras (combined)	65,215	63,649	66,333	237.8	—	226.2	—	229.2	—

Source : Natural Crime Records Bureau, 1991.

TABLE 3
INCIDENCE OF COGNIZABLE CRIMES (IPC) UNDER DIFFERENT
CRIME HEADS IN FOUR MAJOR CITIES

CITIES	MURDER			ATTEMPT TO COMMIT MURDER			RAPE			KIDNAPPING AND ABDUCTION			THEFT		CRIMINAL BREACH OF TRUST				CHEATING		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Delhi	417	4.9	1	438	5.2	1	195	2.3	1	767	9.0	1	12587	148.4	1	515	6.1	1	1331	15.7	1
Bombay	473	3.7	2	261	2.0	2	114	0.9	2	332	2.6	2	16201	127.1	2	687	5.4	2	1255	9.8	2
Calcutta	92	0.8	4	149	1.4	4	17	0.2	4	110	1.0	3	6899	62.8	4	322	2.9	3	584	5.3	4
Madras	81	1.5	3	118	2.2	3	26	0.5	3	24	0.4	4	6135	113.6	3	126	2.3	4	394	7.3	3
Bombay Calcutta Madras (Combined)	646	2.2	-	528	1.8	-	157	0.5	-	466	1.6	-	29235	101.3	-	1135	3.9	-	2233	7.8	-

A=number of case

B=Volume of total cognizable crimes incidence per lakh of population

B=Ranking

National Crime Records Bureau-1991

TABLE 4
CRIME IN DELHI

YEAR	CASE REPORTED	CASE PUT IN COURT	CONVICTION
Kidnapping			
1989	644	208 (32.3)	12 (1.9)
1990	657	210 (32.0)	6 (0.9)
1991	658	115 (17.5)	—
Murder			
1989	351	244 (69.5)	2 (0.6)
1990	394	269 (68.3)	1 (0.3)
1991	496	274 (55.2)	—
Attempt to Murder			
1989	367	337 (91.8)	2 (0.5)
1990	387	336	1
1991	501	230 (45.9)	—
Robbery			
1989	214	131 (61.2)	4 (1.9)
1990	224	150 (67.0)	1 (0.4)
1991	284	133 (46.8)	1 (0.3)
Dacoity			
1989	15	12 (80.0)	—
1990	21	17 (81.0)	—
1991	33	23 (69.7)	—

SOURCE: HOME MINISTER IN LOK SABHA, MARCH 1992
* FIGURES IN BRACKETS ARE PERCENTAGES.

1986, crime has declined in Madras and Calcutta but this is not the case with Bombay and Delhi. In both these cities crime has risen but Delhi outstrips Bombay. While Bombay's quinquennial average (1986-90) in terms of increase is 8 per cent Delhi's is that of 20 per cent (Table 5).

The statistics regarding the number of arrests and convictions resulting from the reporting of crime in Delhi is rather disappointing. This probably calls for improved methods of detection, more efficient policing practices, greater and more just use of law and its agencies, increase in the numbers of police personnel, deployment of modern methods of communication and record keeping, and substantial increase in surveillance through making the police mobile.

Informed sources analyse that the dramatic rise in crime rates in Delhi has been caused by a breakdown in social organisation. Environmental pressures are pushing people towards community offence. The crime against property has an indirect impact on the health of people as far as mental stress and illness, suicides and attempted suicide are concerned. But, the crimes against person have direct implications for the health and medical services. It is informally stated that amongst the offenders there are more men than women, more adolescents and young adults than other age-groups, more poor and illiterate than their counterparts, more homeless than those with fixed address.

Crimes against women

In India every :

- * 23 minutes a woman is sexually harassed
- * 26 minutes a woman is insulted
- * 43 minutes a woman is kidnapped
- * 54 minutes a woman is raped
- * 2 hours a woman is killed for dowry

The position of women in Delhi is not good either (Table 6). Except under Dowry Prohibition Act (DPA), crimes under all other categories, like dowry death, rape, eve-teasing (sexual harassment), molestation



Minors' Rape

The sharp rise in rape cases is distressing when the crimes against women are scrutinized. As far as the crime is concerned Delhi leaves other metropolitan cities far behind. Out of 236 cases reported in 1991 in all UTs, Delhi tops the list with 214 (90.7 percent) cases. The shocking fact is the rise in the rapes of the minors (below 16 years according to Section 376 IPC). Commenting on the increase in child rape the National Crime Records Bureau observes, "it should be a matter of serious concern that the cases of 'PAEDOPHILIA', that is, child rape (below 10 years) which is a menace to the society, have multiplied manifold (from 394 in 1990 to 1099 in 1991.... In the UT of Delhi 32 cases of child rape were reported during the year as against none during the last three years (1988-90)".

Minors' rape cases had constituted 71 per cent of the total rape cases till the first six months of 1993 (Table 7). A majority of the incidence of minor rapes have taken place in the MCD area especially the north, followed by the west, south and east zones respectively.

According to the Deputy Commissioner of Crime (Crime Against Women Cell) Ms. Yamin Hazarika, the most vulnerable age group as far as rape is concerned is from 12 years to 18 years and the most vulnerable section of society is the lower class, mainly residing in close proximity to 'Jhuggi-jhonpri' clusters. The higher rate amongst this class of society living in overcrowded conditions is, in most cases, because of mothers' absence from house owing to her employment. If not employed, mothers are occupied with routine household work like fetching water or fuel wood leading to consequent neglect of the child.

Ritu Menon of Kali for Women asserts that although, over the last fifteen years, there has been a spurt in the reporting of cases of child rape, particularly from inner cities and squatter colonies, it would be a mistake to conclude that the child abuse is confined to the socially and economically deprived.

of women, abetment to suicide and cruelty have increased over the years. Comparing the dowry deaths with the DPA, the inefficiency of the Dowry Prohibition Act becomes clear. While the dowry deaths have increased more than two-folds over a period of seven years, the crime under the DPA has slumped into statistical nothingness. Though amended twice in 1984 and 1986, the DPA leaves ample room for the dowry seekers to sneak out of it.

The mere reporting of the crime does not end the problem. There are various stages through which a case must pass. Unfortunately, the investigation takes long time before the case is put in the court and takes even longer to reach the conviction stage and often it is not easy to enforce the conviction (Table 4).

The experience of social workers and the police suggests that it is common to all sections of society and that much of it takes place within the family (National Commission for Women, 1992).

She further states that poverty and unemployment in our inner cities might well provide fertile ground for criminality, but two other disturbing features have been noted by the police:

- * The age group indulging in violent sexual abuse has dropped from the earlier 30-40 years to 18-25 years.
- * Over the last decade or so, the increase in violent crime seems to correspond to the increasingly violent and pornographic content of many films, magazines, posters and cassettes freely available.

Cause and effect of criminal behaviour in a rapidly

growing city like Delhi might be difficult to establish on issues like this. Ramphal (8) and Sanjay (12) two boys accused for raping their 8-year-old playmate in Najafgarh in 1991 had told the social workers in the remand home that they had often seen such acts on television and thought they would try it out themselves.

Increasing Involvement of Police in Crimes

There are numerous instances in which policemen have been found involved in crime in one way or the other. According to Mr. M.B. Kaushal, the Commissioner of Police, at least 261 policemen were punished in Delhi each month for various offences in the first four months of 1993.

Besides, the custodians of law turning into criminals, the nexus between the Perpetrator

TABLE 5
INCIDENCE OF TOTAL COGNIZABLE CRIMES IN
FOUR MAJOR CITIES DURING 1986-91

CITIES	INCIDENCE OF CRIMES						PERCENTAGE CHANGE IN 1991 (+) = INCREASE (-) = DECREASE	
	1986	1987	1988	1989	1990	1991	QUINQUENNIAL AVERAGE (1986-90)	1990
Delhi	27813 (100.0)	23837 (85.7)	25530 (91.8)	28467 (102.4)	29510 (106.1)	32462 (116.7)	20.1	10.0
Bombay	36643 (100.0)	36018 (98.3)	35802 (97.7)	37309 (101.8)	38302 (104.5)	39897 (108.9)	8.4	4.2
Calcutta	14013 (100.0)	13219 (94.3)	13652 (97.4)	13738 (98.0)	12975 (92.6)	13803 (98.5)	2.1	6.4
Madras	13466 (100.0)	13827 (102.7)	13947 (103.4)	14168 (105.2)	12372 (91.9)	12633	(-) 6.8	2.1

Note : Figures in brackets are percentages taking 1986 = 100.

Source : National Crime Records Bureau, 1991.

TABLE 6
CRIME AGAINST WOMEN IN DELHI (REPORTED CASES)

S.NO	CRIME HEAD	1985	1986	1987	1988	1989	1990	1991	1992	1993 (Upto June)
1.	Dowry Death	54 (0.7)	79 (1.0)	79 (1.0)	103 (1.2)	109 (1.2)	117 (1.3)	125 (1.3)	126 (1.3)	56
2.	Rape	88 (1.2)	97 (1.2)	104 (1.3)	127 (1.5)	161 (1.8)	196 (2.2)	214 (2.3)	276 (2.8)	172
3.	Eve-Teasing	756 (10.8)	2021 (25.9)	1777 (21.9)	2941 (34.9)	2414 (34.9)	2061 (22.8)	2376 (25.4)	2301 (27.7)	1050
4.	Molestation of women	94 (1.3)	112 (1.4)	95 (1.2)	130 (1.5)	130 (1.8)	177 (2.0)	203 (2.2)	226 (2.3)	134
5.	Dowry Prohibition Act	10 (0.1)	10 (0.1)	12 (0.1)	10 (0.1)	10 (0.1)	6 (0.1)	5 —	4 —	4
6.	406 IPC	71 (0.9)	141 (1.8)	210 (2.6)	390 (4.6)	268 (3.1)	198 (2.2)	137 (1.5)	238 (2.4)	155
7.	498-AIPC	222 (3.0)	266 (3.4)	344 (4.2)	349 (4.1)	336 (3.8)	369 (4.1)	431 (4.6)	598 (6.1)	350

NOTE: Figures within brackets are number of crimes per lakh of population.
SOURCE: Crime Against Women Cell, 1993.

TABLE 7
**NUMBER OF MINOR RAPE CASES DURING
JANUARY-JUNE, 1993**

BY ZONES AND AREAS			
AREAS	NUMBER OF MINOR RAPE CASES	AREAS	NUMBER OF MINOR RAPE CASES
East	23	Delhi Municipal Corporation	112
West	30	N.D.M.C.	9
North	34	Delhi Cantt.	1
South	26		
Central	9		
Total (Delhi)	122		122

Percentage of minor rape cases (122) to total rape cases (172) is: 70.93
Source: List of Minors' Rape Cases, Crime Against Women Cell,
Delhi Police, 1993.

(criminals)- Police - Politicians emerges as a stark reality. The police slogan 'with you, for you, always' in reality means 'without you, (not) for you, always'. As one study remarks, "The police themselves, then are the perpetrators, promoters and perpetrators of women's oppression". It further observes "The bootied brutes are mostly very notorious. Whether it is the three-wheeler driver, ice-cream vendors, UPSC Chatwala, the police, utilise their services, fill their stomach and pay not a single penny out of the extorted amount".

The public for whose security the police is meant is too terrified to repose faith in them. Anyone can be put behind bars on trumped up charges. Common people want to avoid this eventuality. The only people who do not fear the police and law are perhaps the criminals. The irony is that while law-abiding citizens dread police and criminals, criminals have no one to fear. Crime, as a consequence, in the

national capital is increasing leaps and bounds.

Reasons for increase in crime

Among the multifarious reasons for the dramatic increase in crime in Delhi the salient include:-

- * Rapid urbanisation and as a result of migration from rural areas
- * Anonymity, opportunities to remain unnoticed
- * Increased alienation from the city and its people
- * Apathetic individuals unwilling to exercise control
- * Lack of community feeling and the spirit of belonging and sharing
- * Unemployment, underemployment
- * Illiteracy
- * Polarities in living standards
- * Increasing greed and tendency towards aggrandisement
- * Rampant corruption at all levels
- * Commercialisation of values
- * Consumerist culture
- * Unbridled multimedia exposure
- * Commoditisation of women through practices like dowry, advertisements, movies, magazines, pornographic film shows, cabarets etc
- * Violence based films
- * Complete degeneration of moral values engendered by political patronage of criminals, that is criminal-politician-police nexus
- * Advocacy centred judiciary
- * Absence of positive role-models
- * Lack of respect for others
- * Decline in parental control and other informal interventions
- * Massive gaps in reporting of crime, trial of the case, conviction and its enforcement
- * Cut-throat survival competition
- * Policing practices

Suggestions

To make Delhi a livable place the unhindered increase in crimes has to be restrained. For this some of the basic prerequisites are:-

- * The formation of citizens/residents committees
- * Increased interaction with neighbours
- * Peoples' initiative in making one's vicinity livable

- * People's initiative functioning as pressure groups
- * Formation of intra-locality and inter-locality groups
- * Healthy social interaction between girls and boys and women and men
- * Pruning of violence dominated and gender typical films
- * Social grounding of police force through refresher courses, moral education, gender sensitisation etc.
- * A thorough overhaul of the constabulary
- * Senior level supervision at thana level
- * Improved functioning of prosecution branch
- * Time frame should be set down for the trial of all cases, especially the ones pertaining to women (dowry, rape etc)
- * Special investigation teams (in order to investigate crimes against women, women's organisations should be involved)
- * Special Courts for the Dowry death, and rape cases
- * Tackling the afore mentioned reasons for increase in crimes on war footing

The rise in the deviant, delinquent and criminal behaviour of people in Delhi is the result of fundamental change in the structure of the residential areas. Crime is correlated with bad housing, deteriorating social and physical environment, pockets of poverty, unemployment and disease, concentration of new migrants, weak personal life, personal disorganisation etc.

Today, Delhi is ailing. Its inhabitants are at their nerves end. Crime is at its worst. This is the scenario today. What would it be like in the year 2001? Definitely horrendous, if nothing is done today. The hope lies with the people of Delhi. Everyone must contribute to reduce crime and friction situations. The residents of this city constitute the society in Delhi. If crime is high in Delhi today it is not only because of the criminals but also due to the reigning apathy of the citizens of Delhi.

It is high time to face the uphill task of reducing crimes, collectively and individually. ♦

EVERY CANDIDATE STANDING FOR THE ELECTIONS SHOULD DECLARE HIS/HER ASSETS

- Baikunth Lal Sharma 'Prem' East Delhi M.P. on Delhi

The Union Territory of Delhi will be in the hands of the Central Government after the elections in Delhi. There will be no legislative assembly. The role of the bureaucracy will be minimised. The elected representatives will depend on the Centre for the implementation of programmes.

MPs in Delhi are like shuttle cocks between the public and the officials. Bureaucracy has been acting in a very high handed manner and is not bothered about common people. If you put pressure on bureaucracy then things would function properly. The bureaucrats are just like donkeys, all you need is a good rider.

The flow of population into Delhi is very great and since East Delhi is comparatively cheap they settle there only. But with regard to development expenditure, the discrimination meted out to East Delhi is very stark. While Rs.206 per year is spent per head in North Delhi, Rs.196 in Chandni Chowk, Rs.185 in West Delhi, only Rs.15 is spent in East Delhi.

I am fond of calling East Delhi as "Bhagwan Shankar Ki Barat" (Lord Shiva's Wedding party - comprising of amorphous and motley crowd). People live there as sheeps do. The Sita and Savitri of Delhi live naked, make food outside and have no latrines. East Delhi is full of problems, including:-

- * Law and order
- * Rape
- * Murder
- * Dowry deaths
- * Prostitution
- * Eunuch making
- * Illegal arms factory
- * Bootlegging
- * Unlicensed slaughter house
- * Land grabbing through Bhumi Mafia
- * Massive corruption "Bhrastachar Bharpur Hai, Bharmar Hai", the cost of filing an F.I.R in a police station varies between Rs.200 to Rs. 1000

- * Non-implementation of government schemes
- * Shortage of schools and colleges
- * Schools in tents
- * Shortage of hospitals, Sanitation, Sewerage, electricity, water

The inspectors of the Delhi Administration demand Rs.300 from the applicants for approving the cases under various schemes like old age pension, widow assistance, assistance to physically handicapped etc. It is only in name that India is a social welfare state.

The condition of Delhi is quite peculiar. It has to depend on other states for vegetables, food grains, electricity, water etc. The politicians too are responsible for the problems that Delhi is facing today. Just to ensure their votes it is the politicians who encourage the migrants to settle and encroach land.

The government should bring out an ordinance to stop the entry of people into Delhi. Those who are already here they should be asked to pay a nominal fee. After that, everyone should be settled properly. The central government offices should be dispersed to other areas of the country.

Development should begin from grassroots. The occupational castes (like weaver, cobblers etc.) should be given training so that they can stand on their feet. Today politics has become more of a profession than a mission or a service to the people. It is imperative that every candidate standing for the elections should declare his/her assets and the assets held in the names of various family members. One who keeps more than his needs is a thief.

Due to my efforts ten projects worth Rs.100 crores have been sanctioned for establishing development centres in various parts of East Delhi. With the setting up of this development programme including commercial complex, educational institutions, police stations, fire stations, cultural centres, nursing home, five star hotels, cinema halls, air conditioned trade centre, sports complex, international level swimming pool etc.) East Delhi will become second Connaught Place or even outstrip Chandni Chowk, Ajmal Khan Road and Connaught Place.



ACTION

We plead that the policies and actions must :

- * promote social justice and ensure distribution of services, facilities and resources according to felt needs of the people
- * focus on comprehensive development of the deprived areas through improved coordination between various governmental agencies
- * forge effective networking between various NGOs and Voluntary organisations
- * acknowledge the existence of deprived areas and adopt strategies of upgrading the existing conditions and not of demolition of settlements and large scale shifting of the residents
- * intervene for immediate alleviation of situations as much as for long term solutions
- * provide mechanisms of democratic control to the people over the quality of their lives, housing, environment, health status, sources of livelihood
- * give a human face to large bureaucracies which cause frustration and lowering of morale and run locally based information centres managed by voluntary agencies
- * extend a minimum level of health, sanitation, hygiene, education, housing and other basic facilities including security and law and order
- * set up a centralised and technologically up-to-date information service for data on all aspects of Delhi to serve the policy maker, the administrator, the activist, the scholar, the service provider and the resident

GLOSSARY

CATS	: Centralised Accident and Trauma Service
CGHS	: Central Government Health Services
DDA	: Delhi Development Authority
DESU	: Delhi Electricity Supply Undertaking
DMS	: Delhi Milk Scheme
DTC	: Delhi Transport Corporation
GPCD	: Gallons Per Capita a Day
ICDS	: Integrated Child Development Services
IMR	: Infant Mortality Rate
LLD	: Lakh Litres a Day
MCD	: Municipal Corporation of Delhi
MCH	: Maternal and Child Health
MCI	: Medical Council of India
MGD	: Million Gallons a Day
MLD	: Million Litres a Day
MTNL	: Mahanagar Telephone Nigam Limited
MW	: Mega Watt
NCR	: National Capital Region
NDMC	: New Delhi Municipal Corporation
NGOs	: Non-Governmental Organisations
PWD	: Public Works Department
STA	: State Transport Authority
TBAs	: Traditional Birth Attendants
VOLAGs	: Voluntary Agencies

REFERENCES

- Ali, Sabir 1990. *Slums Within Slums: A study of Resettlement Colonies in Delhi*. New Delhi: Har-Anand Publications.
- Banerjee, Usha. 1978. *Health Administration in A Metropolis*. New Delhi: Abhinav Publications.
- Delhi Development Authority. 1990. *Master Plan for Delhi: Perspective 2001*. New Delhi.
- Delhi Administration. 1991. *Medical Directory*. Delhi.
- Government of National Capital Territory of Delhi. 1992. *Delhi Statistical Handbook*.
- Jag Parvesh Chandra. 1992. *Delhi is Doomed Without Metro*. New Delhi.
- Jain, A.K. 1990. *The Making of A Metropolis: Planning and Growth of Delhi*. New Delhi. National Book Organisation.
- Jan Madhyam. 1992. *Directory of Services for People with Special Needs*. New Delhi.
- Carr-Harris, Jill. 1992. *New Dimensions of Eco-Health*. New Delhi: South-South Solidarity.
- Mishra, Girish K. and K.S.R.N. Sharma. 1979. *Distribution and Differential Location of Public Utilities in Urban Delhi*. New Delhi : IIPA.
- Nanda, Priya and Rama Baru. 1993. Private Nursing Homes and Utilisation Pattern, in *Medical Care-A Case Study of Delhi*. New Delhi: VHAI.
- National Commission for Women. 1992. Report of Seminar on Child Rape, October 7-8 New Delhi.
- National Crime Records Bureau. 1991. *Crime in India*. New Delhi.
- National Institute of Urban Affairs. 1988. *Dimensions of Urban Poverty: A Situational Analysis*. New Delhi.
- Umashankar, P.K. and Girish K. Mishra (Ed.). 1993. *Urban Health System*. New Delhi: Reliance Publishing House.
- VHAI. 1988. *Civic Neglect and Ill-Health: A Brief Enquiry into the Cholera Epidemic in Delhi*. New Delhi.
- VHAI. 1992. *State of India's Health*. New Delhi.

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| 19. Mr. J. H. Smith | 20. Mr. J. H. Smith | 21. Mr. J. H. Smith |
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***There was a city, famed throughout the world,
Where dwelt the chosen spirits of the ages:
Delhi its name, fairest among the fair,
Fate looted it and laid it desolate,
And to that ravaged city we belong.***

Mir Taqi Mir
(1722 - 1810)



Voluntary Health Association of India
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